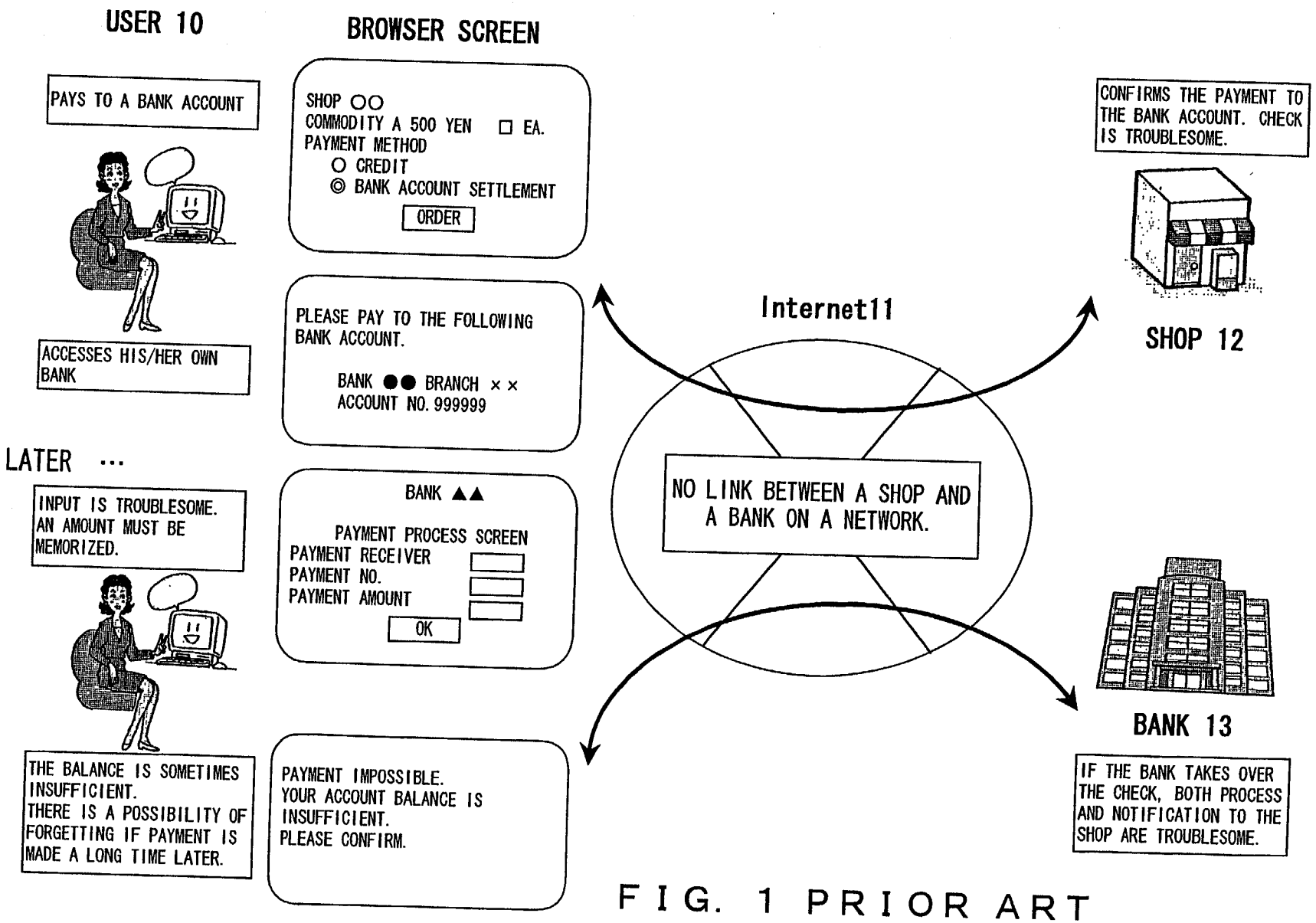


FIG. 1 PRIOR ART

USER 20

PAYS TO A BANK ACCOUNT

AUTOMATICALLY SWITCHED TO A PAYMENT SCREEN

PAYMENT RESERVATION

LATER ...

A LIST OF PAYMENT TO BE SETTLED IS CLEARLY DISPLAYED.
THE PAYMENT TIME LIMIT IS ALSO CLEARLY DISPLAYED.

NO NEED FOR TROUBLESOME INPUT. CAN BE EASILY PAID.

BROWSER SCREEN

SHOP ○○
COMMODITY A 500 YEN □ EA.
PAYMENT METHOD
○ CREDIT
◎ PAYMENT RESERVATION
ORDER

PAYMENT RESERVATION SERVICE

YOU ARE AUTHORIZED TO USE THIS SERVICE. WHEN DO YOU PAY?

PAY NOW | PAY LATER
CANCEL

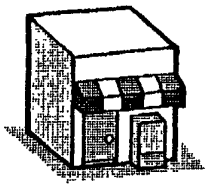
LIST OF UNSETTLED PAYMENT
IF YOU PAY, SELECTS A SHOPPING ITEM TO BE SETTLED.
□03/05/99 SHOP A SHOES 3,000 YEN
■04/13/99 SHOP B HAT 2,000 YEN
□04/20/99 SHOP C SUIT 8,000 YEN
TOTAL 13,000 YEN
PAY | BACK

PAYMENT CONFIRMATION
THE FOLLOWING ORDER IS SETTLED.
PLEASE INPUT YOUR ACCOUNT NUMBER AND PASSWORD.
8/5/99 SHOP A SHOES 3,000 YEN
PAYMENT NUMBER 2357
PAYMENT PASSWORD ****
OK | BACK

Internet24

CLAIM MANAGEMENT SERVER 23

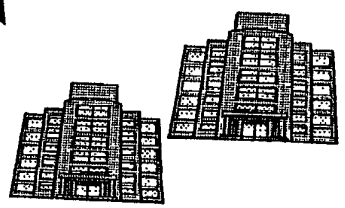
SHOP 21



CHECK WORK IS LEFT TO THE CLAIM MANAGEMENT SERVER.

LIST OF ORDERS
□8/5/99 SHOES 3,000YEN UNSETTLED
■8/7/99 HAT 2,000YEN SETTLED
□8/9/99 SUIT 8,000YEN UNSETTLED
DETAIL | RETURN

ACCOUNT HANDLING INSTITUTE 22



DISPLAYS RESERVATION INFORMATION FROM THE CLAIM MANAGEMENT SERVER ON THE USER'S SCREEN. ACTUALLY PAYS.

FIG. 2

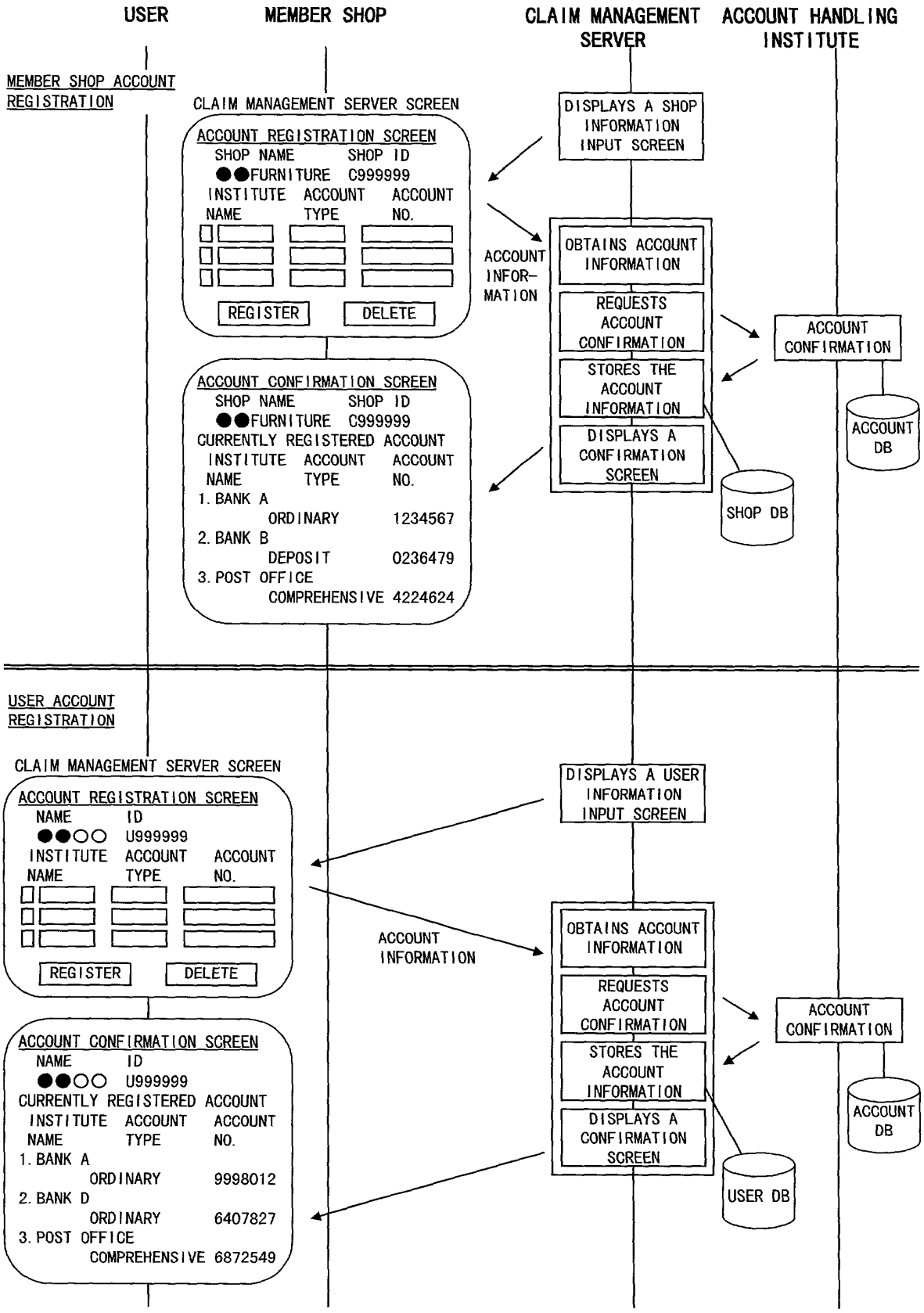

USER
MEMBER SHOP
CLAIM MANAGEMENT SERVER
ACCOUNT HANDLING INSTITUTE
MEMBER SHOP ACCOUNT REGISTRATION
CLAIM MANAGEMENT SERVER SCREEN
ACCOUNT REGISTRATION SCREEN
SHOP NAME
SHOP ID
●●FURNITURE
C999999
INSTITUTE NAME
ACCOUNT TYPE
ACCOUNT NO.
REGISTER
DELETE
ACCOUNT CONFIRMATION SCREEN
SHOP NAME
SHOP ID
●●FURNITURE
C999999
CURRENTLY REGISTERED ACCOUNT
INSTITUTE NAME
ACCOUNT TYPE
ACCOUNT NO.
1. BANK A
ORDINARY
1234567
2. BANK B
DEPOSIT
0236479
3. POST OFFICE
COMPREHENSIVE
4224624
DISPLAYS A SHOP INFORMATION INPUT SCREEN
ACCOUNT INFOR-MATION
OBTAINS ACCOUNT INFORMATION
REQUESTS ACCOUNT CONFIRMATION
STORES THE ACCOUNT INFORMATION
DISPLAYS A CONFIRMATION SCREEN
ACCOUNT CONFIRMATION
ACCOUNT DB
SHOP DB
USER ACCOUNT REGISTRATION
CLAIM MANAGEMENT SERVER SCREEN
ACCOUNT REGISTRATION SCREEN
NAME
ID
●●○○
U999999
INSTITUTE NAME
ACCOUNT TYPE
ACCOUNT NO.
REGISTER
DELETE
ACCOUNT CONFIRMATION SCREEN
NAME
ID
●●○○
U999999
CURRENTLY REGISTERED ACCOUNT
INSTITUTE NAME
ACCOUNT TYPE
ACCOUNT NO.
1. BANK A
ORDINARY
9998012
2. BANK D
ORDINARY
6407827
3. POST OFFICE
COMPREHENSIVE
6872549
DISPLAYS A USER INFORMATION INPUT SCREEN
ACCOUNT INFORMATION
OBTAINS ACCOUNT INFORMATION
REQUESTS ACCOUNT CONFIRMATION
STORES THE ACCOUNT INFORMATION
DISPLAYS A CONFIRMATION SCREEN
ACCOUNT CONFIRMATION
ACCOUNT DB
USER DB

FIG. 3

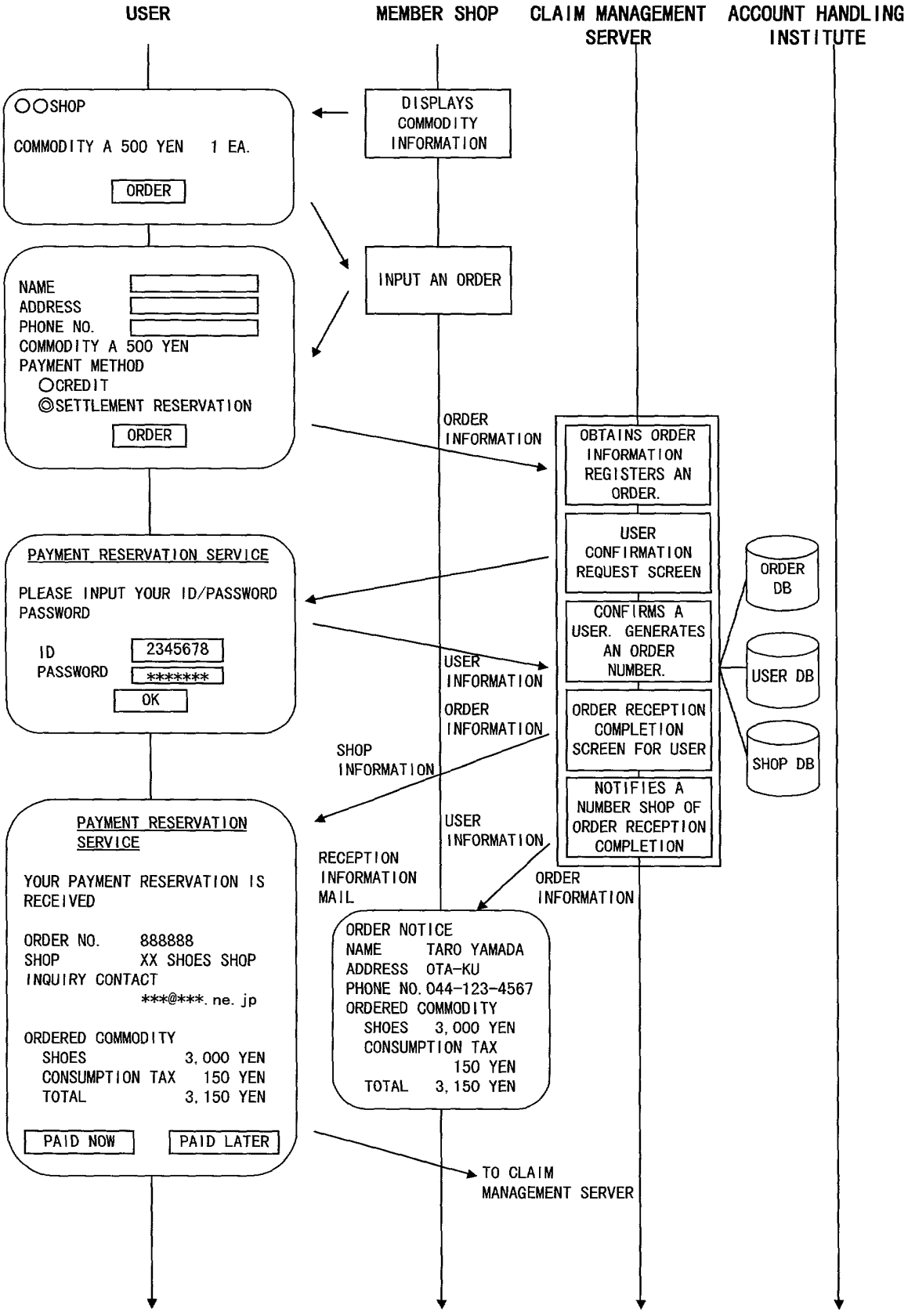

USER
MEMBER SHOP
CLAIM MANAGEMENT SERVER
ACCOUNT HANDLING INSTITUTE
○○SHOP
COMMODITY A 500 YEN 1 EA.
ORDER
DISPLAYS COMMODITY INFORMATION
NAME
ADDRESS
PHONE NO.
COMMODITY A 500 YEN
PAYMENT METHOD
○CREDIT
◎SETTLEMENT RESERVATION
ORDER
INPUT AN ORDER
ORDER INFORMATION
OBTAINS ORDER INFORMATION REGISTERS AN ORDER.
USER CONFIRMATION REQUEST SCREEN
CONFIRMS A USER. GENERATES AN ORDER NUMBER.
ORDER RECEPTION COMPLETION SCREEN FOR USER
NOTIFIES A NUMBER SHOP OF ORDER RECEPTION COMPLETION
ORDER DB
USER DB
SHOP DB
PAYMENT RESERVATION SERVICE
PLEASE INPUT YOUR ID/PASSWORD
PASSWORD
ID 2345678
PASSWORD *******
OK
USER INFORMATION
ORDER INFORMATION
SHOP INFORMATION
PAYMENT RESERVATION SERVICE
YOUR PAYMENT RESERVATION IS RECEIVED
ORDER NO. 888888
SHOP XX SHOES SHOP
INQUIRY CONTACT
@.ne.jp
ORDERED COMMODITY
SHOES 3,000 YEN
CONSUMPTION TAX 150 YEN
TOTAL 3,150 YEN
PAID NOW
PAID LATER
USER INFORMATION
RECEPTION INFORMATION MAIL
ORDER INFORMATION
ORDER NOTICE
NAME TARO YAMADA
ADDRESS OTA-KU
PHONE NO. 044-123-4567
ORDERED COMMODITY
SHOES 3,000 YEN
CONSUMPTION TAX 150 YEN
TOTAL 3,150 YEN
TO CLAIM MANAGEMENT SERVER

FIG. 4

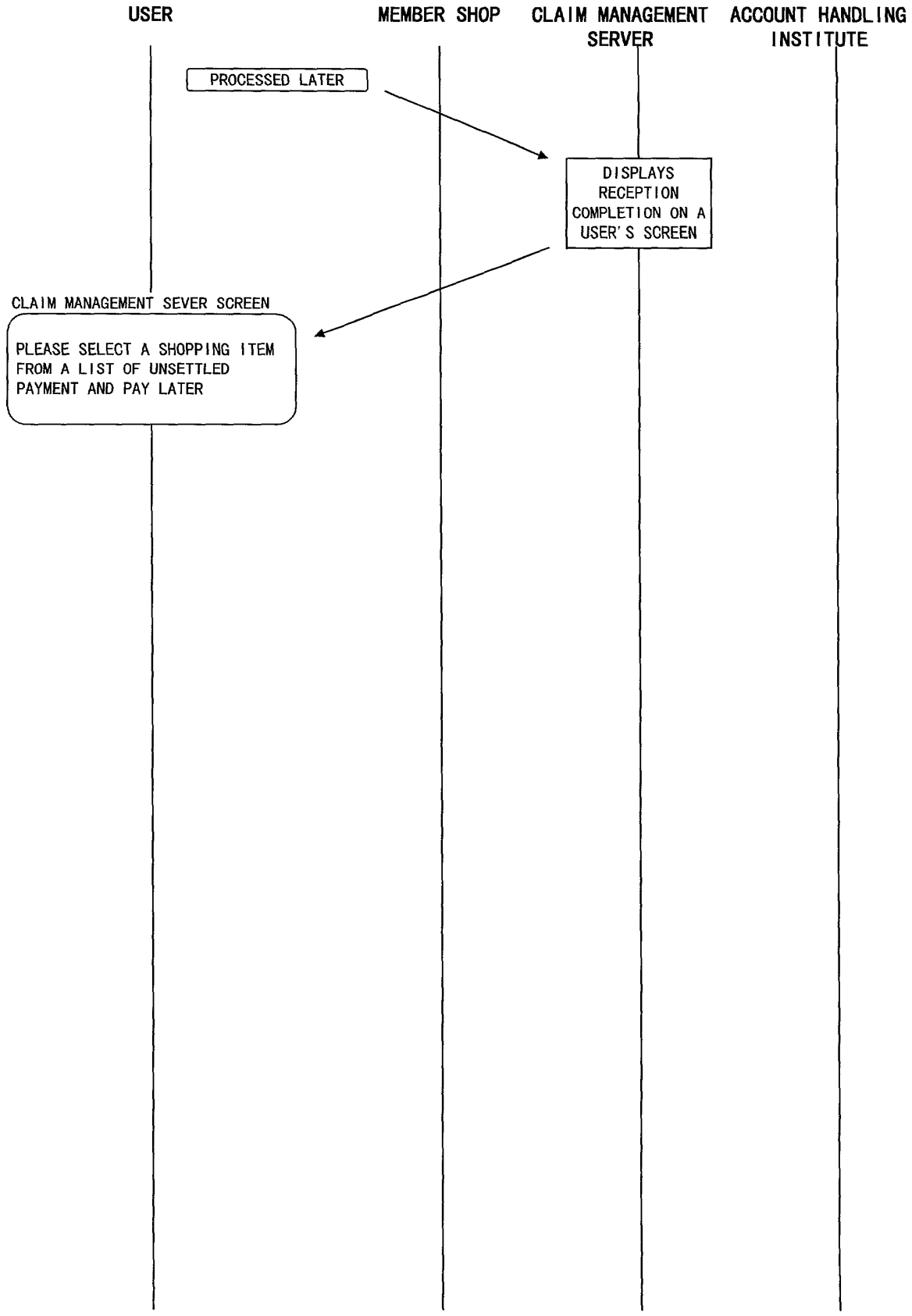

USER
MEMBER SHOP
CLAIM MANAGEMENT SERVER
ACCOUNT HANDLING INSTITUTE
PROCESSED LATER
DISPLAYS RECEPTION COMPLETION ON A USER'S SCREEN
CLAIM MANAGEMENT SEVER SCREEN
PLEASE SELECT A SHOPPING ITEM FROM A LIST OF UNSETTLED PAYMENT AND PAY LATER

FIG. 5

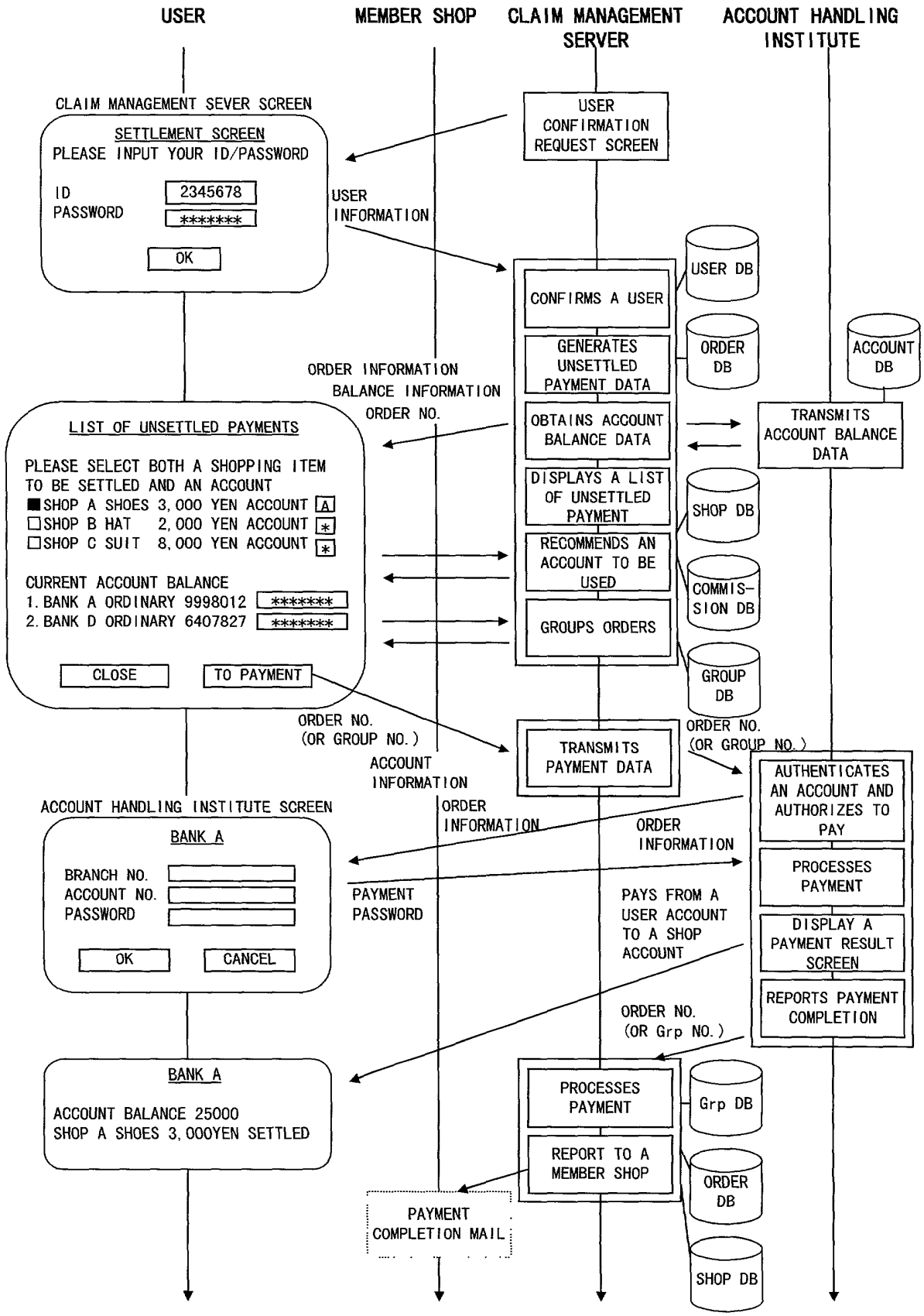

USER
MEMBER SHOP
CLAIM MANAGEMENT SERVER
ACCOUNT HANDLING INSTITUTE
CLAIM MANAGEMENT SEVER SCREEN
SETTLEMENT SCREEN
PLEASE INPUT YOUR ID/PASSWORD
ID
2345678
PASSWORD
****
OK
USER INFORMATION
USER CONFIRMATION REQUEST SCREEN
CONFIRMS A USER
USER DB
GENERATES UNSETTLED PAYMENT DATA
ORDER DB
ACCOUNT DB
ORDER INFORMATION
BALANCE INFORMATION
ORDER NO.
OBTAINS ACCOUNT BALANCE DATA
TRANSMITS ACCOUNT BALANCE DATA
LIST OF UNSETTLED PAYMENTS
PLEASE SELECT BOTH A SHOPPING ITEM TO BE SETTLED AND AN ACCOUNT
■SHOP A SHOES 3,000 YEN ACCOUNT A
□SHOP B HAT 2,000 YEN ACCOUNT *
□SHOP C SUIT 8,000 YEN ACCOUNT *
CURRENT ACCOUNT BALANCE
1. BANK A ORDINARY 9998012 *******
2. BANK D ORDINARY 6407827 *******
CLOSE
TO PAYMENT
DISPLAYS A LIST OF UNSETTLED PAYMENT
SHOP DB
RECOMMENDS AN ACCOUNT TO BE USED
COMMIS-SION DB
GROUPS ORDERS
GROUP DB
ORDER NO. (OR GROUP NO.)
TRANSMITS PAYMENT DATA
ORDER NO. (OR GROUP NO.)
AUTHENTICATES AN ACCOUNT AND AUTHORIZES TO PAY
ACCOUNT INFORMATION
ORDER INFORMATION
ACCOUNT HANDLING INSTITUTE SCREEN
BANK A
BRANCH NO.
ACCOUNT NO.
PASSWORD
OK
CANCEL
ORDER INFORMATION
PROCESSES PAYMENT
PAYMENT PASSWORD
PAYS FROM A USER ACCOUNT TO A SHOP ACCOUNT
DISPLAY A PAYMENT RESULT SCREEN
REPORTS PAYMENT COMPLETION
ORDER NO. (OR Grp NO.)
BANK A
ACCOUNT BALANCE 25000
SHOP A SHOES 3,000YEN SETTLED
PROCESSES PAYMENT
Grp DB
REPORT TO A MEMBER SHOP
ORDER DB
PAYMENT COMPLETION MAIL
SHOP DB

FIG. 6

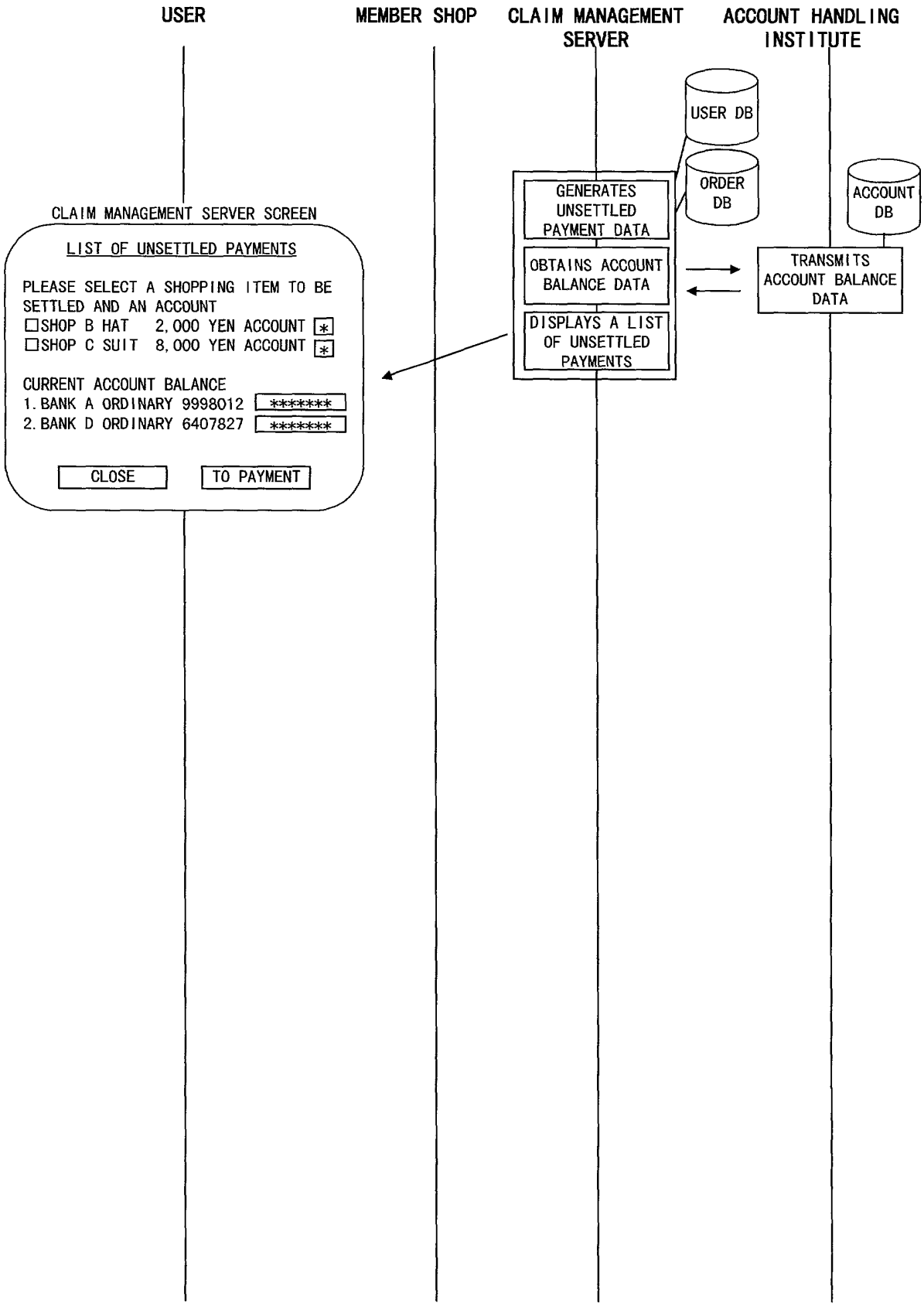

USER
MEMBER SHOP
CLAIM MANAGEMENT SERVER
ACCOUNT HANDLING INSTITUTE
USER DB
ORDER DB
ACCOUNT DB
GENERATES UNSETTLED PAYMENT DATA
OBTAINS ACCOUNT BALANCE DATA
DISPLAYS A LIST OF UNSETTLED PAYMENTS
TRANSMITS ACCOUNT BALANCE DATA
CLAIM MANAGEMENT SERVER SCREEN
LIST OF UNSETTLED PAYMENTS
PLEASE SELECT A SHOPPING ITEM TO BE SETTLED AND AN ACCOUNT
☐SHOP B HAT 2,000 YEN ACCOUNT *
☐SHOP C SUIT 8,000 YEN ACCOUNT *
CURRENT ACCOUNT BALANCE
1. BANK A ORDINARY 9998012 *******
2. BANK D ORDINARY 6407827 *******
CLOSE
TO PAYMENT

FIG. 7

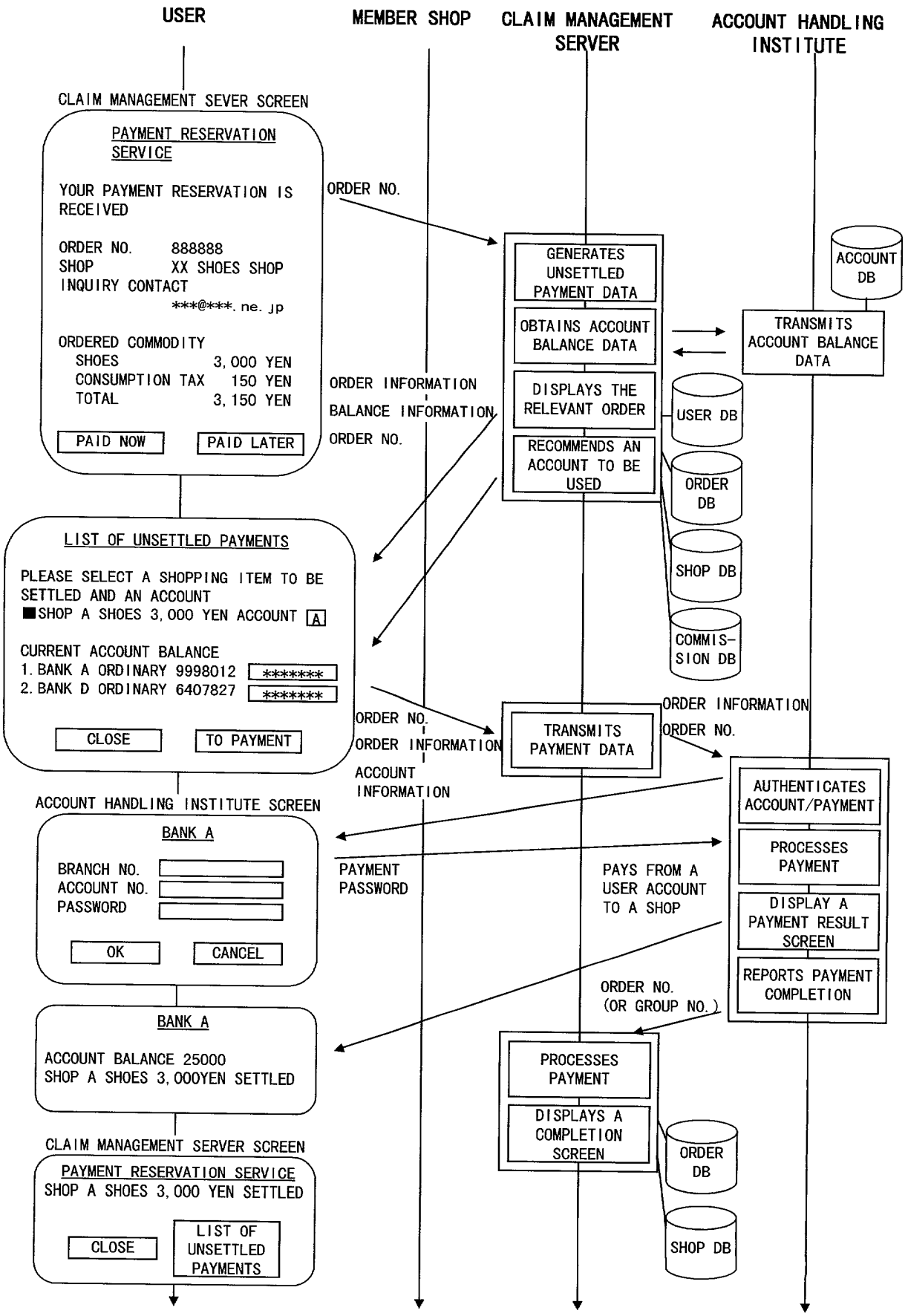

USER
MEMBER SHOP
CLAIM MANAGEMENT SERVER
ACCOUNT HANDLING INSTITUTE
CLAIM MANAGEMENT SEVER SCREEN
PAYMENT RESERVATION SERVICE
YOUR PAYMENT RESERVATION IS RECEIVED
ORDER NO. 888888
SHOP XX SHOES SHOP
INQUIRY CONTACT
@.ne.jp
ORDERED COMMODITY
SHOES 3,000 YEN
CONSUMPTION TAX 150 YEN
TOTAL 3,150 YEN
PAID NOW
PAID LATER
ORDER NO.
ORDER INFORMATION
BALANCE INFORMATION
ORDER NO.
GENERATES UNSETTLED PAYMENT DATA
OBTAINS ACCOUNT BALANCE DATA
DISPLAYS THE RELEVANT ORDER
RECOMMENDS AN ACCOUNT TO BE USED
ACCOUNT DB
TRANSMITS ACCOUNT BALANCE DATA
USER DB
ORDER DB
SHOP DB
COMMIS-SION DB
LIST OF UNSETTLED PAYMENTS
PLEASE SELECT A SHOPPING ITEM TO BE SETTLED AND AN ACCOUNT
■SHOP A SHOES 3,000 YEN ACCOUNT A
CURRENT ACCOUNT BALANCE
1. BANK A ORDINARY 9998012 *******
2. BANK D ORDINARY 6407827 *******
CLOSE
TO PAYMENT
ORDER NO.
ORDER INFORMATION
ACCOUNT INFORMATION
TRANSMITS PAYMENT DATA
ORDER INFORMATION
ORDER NO.
AUTHENTICATES ACCOUNT/PAYMENT
PROCESSES PAYMENT
DISPLAY A PAYMENT RESULT SCREEN
REPORTS PAYMENT COMPLETION
ACCOUNT HANDLING INSTITUTE SCREEN
BANK A
BRANCH NO.
ACCOUNT NO.
PASSWORD
OK
CANCEL
PAYMENT PASSWORD
PAYS FROM A USER ACCOUNT TO A SHOP
ORDER NO. (OR GROUP NO.)
BANK A
ACCOUNT BALANCE 25000
SHOP A SHOES 3,000YEN SETTLED
PROCESSES PAYMENT
DISPLAYS A COMPLETION SCREEN
ORDER DB
SHOP DB
CLAIM MANAGEMENT SERVER SCREEN
PAYMENT RESERVATION SERVICE
SHOP A SHOES 3,000 YEN SETTLED
CLOSE
LIST OF UNSETTLED PAYMENTS

FIG. 8

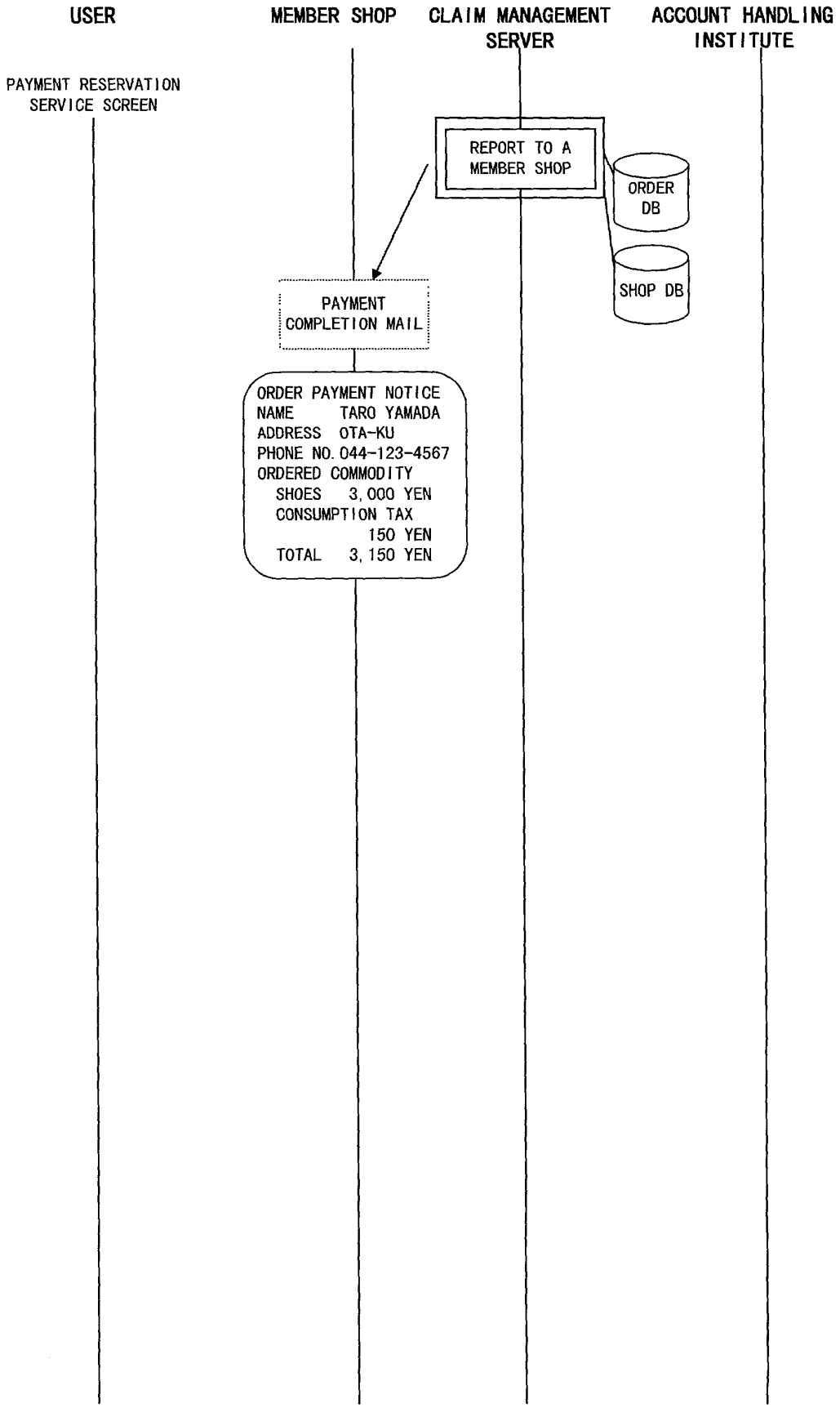

USER
MEMBER SHOP
CLAIM MANAGEMENT SERVER
ACCOUNT HANDLING INSTITUTE
PAYMENT RESERVATION SERVICE SCREEN
REPORT TO A MEMBER SHOP
ORDER DB
SHOP DB
PAYMENT COMPLETION MAIL
ORDER PAYMENT NOTICE
NAME TARO YAMADA
ADDRESS OTA-KU
PHONE NO. 044-123-4567
ORDERED COMMODITY
SHOES 3,000 YEN
CONSUMPTION TAX 150 YEN
TOTAL 3,150 YEN

FIG. 9

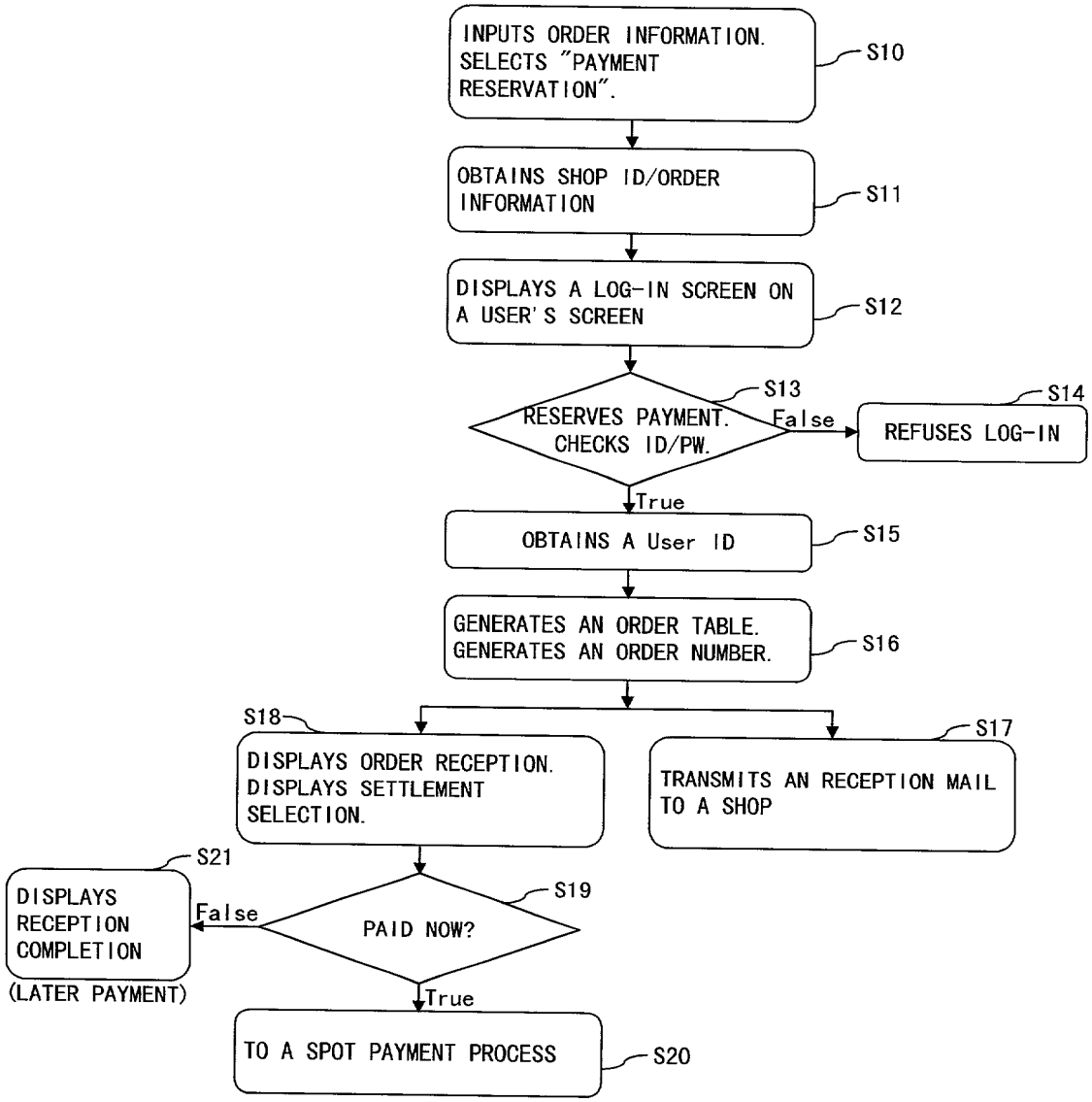

INPUTS ORDER INFORMATION. SELECTS "PAYMENT RESERVATION".
S10
OBTAINS SHOP ID/ORDER INFORMATION
S11
DISPLAYS A LOG-IN SCREEN ON A USER'S SCREEN
S12
RESERVES PAYMENT. CHECKS ID/PW.
S13
False
REFUSES LOG-IN
S14
True
OBTAINS A User ID
S15
GENERATES AN ORDER TABLE. GENERATES AN ORDER NUMBER.
S16
S18
DISPLAYS ORDER RECEPTION. DISPLAYS SETTLEMENT SELECTION.
S17
TRANSMITS AN RECEPTION MAIL TO A SHOP
S21
DISPLAYS RECEPTION COMPLETION
(LATER PAYMENT)
False
PAID NOW?
S19
True
TO A SPOT PAYMENT PROCESS
S20

FIG. 10

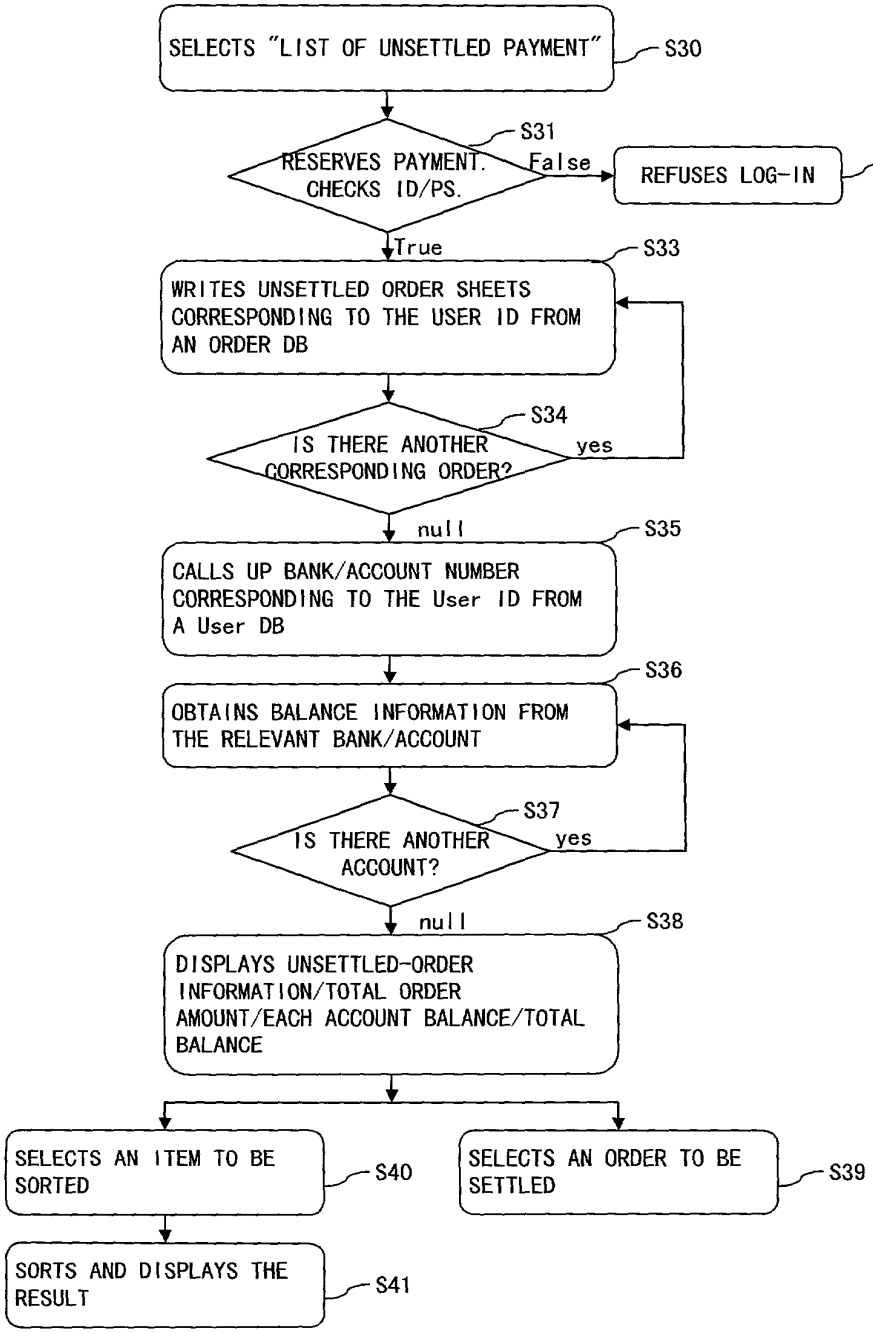

SELECTS "LIST OF UNSETTLED PAYMENT"
S30
S31
RESERVES PAYMENT. CHECKS ID/PS.
False
REFUSES LOG-IN
S32
True
S33
WRITES UNSETTLED ORDER SHEETS CORRESPONDING TO THE USER ID FROM AN ORDER DB
S34
IS THERE ANOTHER CORRESPONDING ORDER?
yes
null
S35
CALLS UP BANK/ACCOUNT NUMBER CORRESPONDING TO THE User ID FROM A User DB
S36
OBTAINS BALANCE INFORMATION FROM THE RELEVANT BANK/ACCOUNT
S37
IS THERE ANOTHER ACCOUNT?
yes
null
S38
DISPLAYS UNSETTLED-ORDER INFORMATION/TOTAL ORDER AMOUNT/EACH ACCOUNT BALANCE/TOTAL BALANCE
SELECTS AN ITEM TO BE SORTED
S40
SELECTS AN ORDER TO BE SETTLED
S39
SORTS AND DISPLAYS THE RESULT
S41

FIG. 11

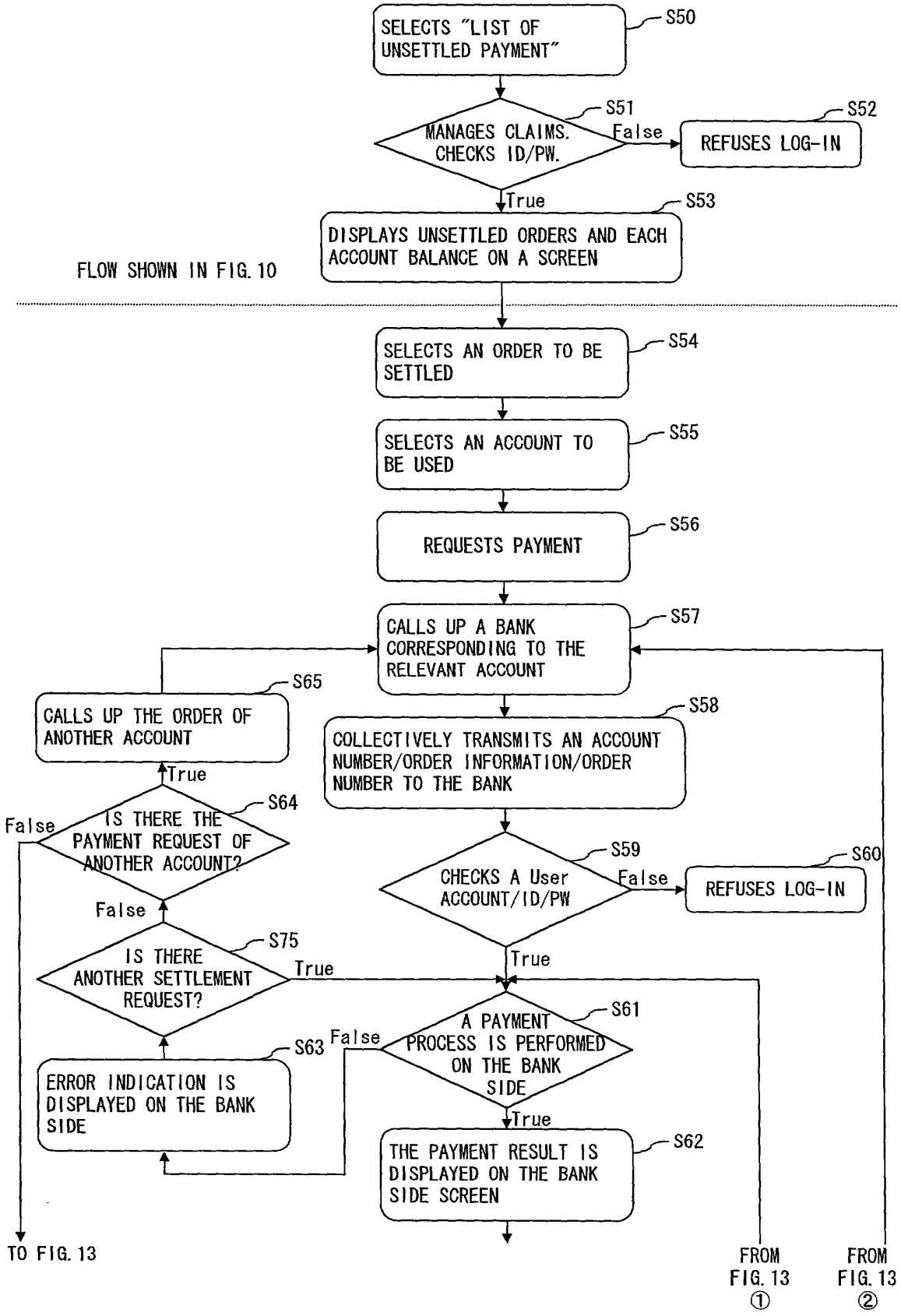

SELECTS "LIST OF UNSETTLED PAYMENT"
S50
MANAGES CLAIMS. CHECKS ID/PW.
S51
False
REFUSES LOG-IN
S52
True
DISPLAYS UNSETTLED ORDERS AND EACH ACCOUNT BALANCE ON A SCREEN
S53
FLOW SHOWN IN FIG. 10
SELECTS AN ORDER TO BE SETTLED
S54
SELECTS AN ACCOUNT TO BE USED
S55
REQUESTS PAYMENT
S56
CALLS UP A BANK CORRESPONDING TO THE RELEVANT ACCOUNT
S57
CALLS UP THE ORDER OF ANOTHER ACCOUNT
S65
COLLECTIVELY TRANSMITS AN ACCOUNT NUMBER/ORDER INFORMATION/ORDER NUMBER TO THE BANK
S58
True
IS THERE THE PAYMENT REQUEST OF ANOTHER ACCOUNT?
S64
False
CHECKS A User ACCOUNT/ID/PW
S59
False
REFUSES LOG-IN
S60
False
IS THERE ANOTHER SETTLEMENT REQUEST?
S75
True
True
A PAYMENT PROCESS IS PERFORMED ON THE BANK SIDE
S61
False
ERROR INDICATION IS DISPLAYED ON THE BANK SIDE
S63
True
THE PAYMENT RESULT IS DISPLAYED ON THE BANK SIDE SCREEN
S62
TO FIG. 13
FROM FIG. 13 ①
FROM FIG. 13 ②

FIG. 12

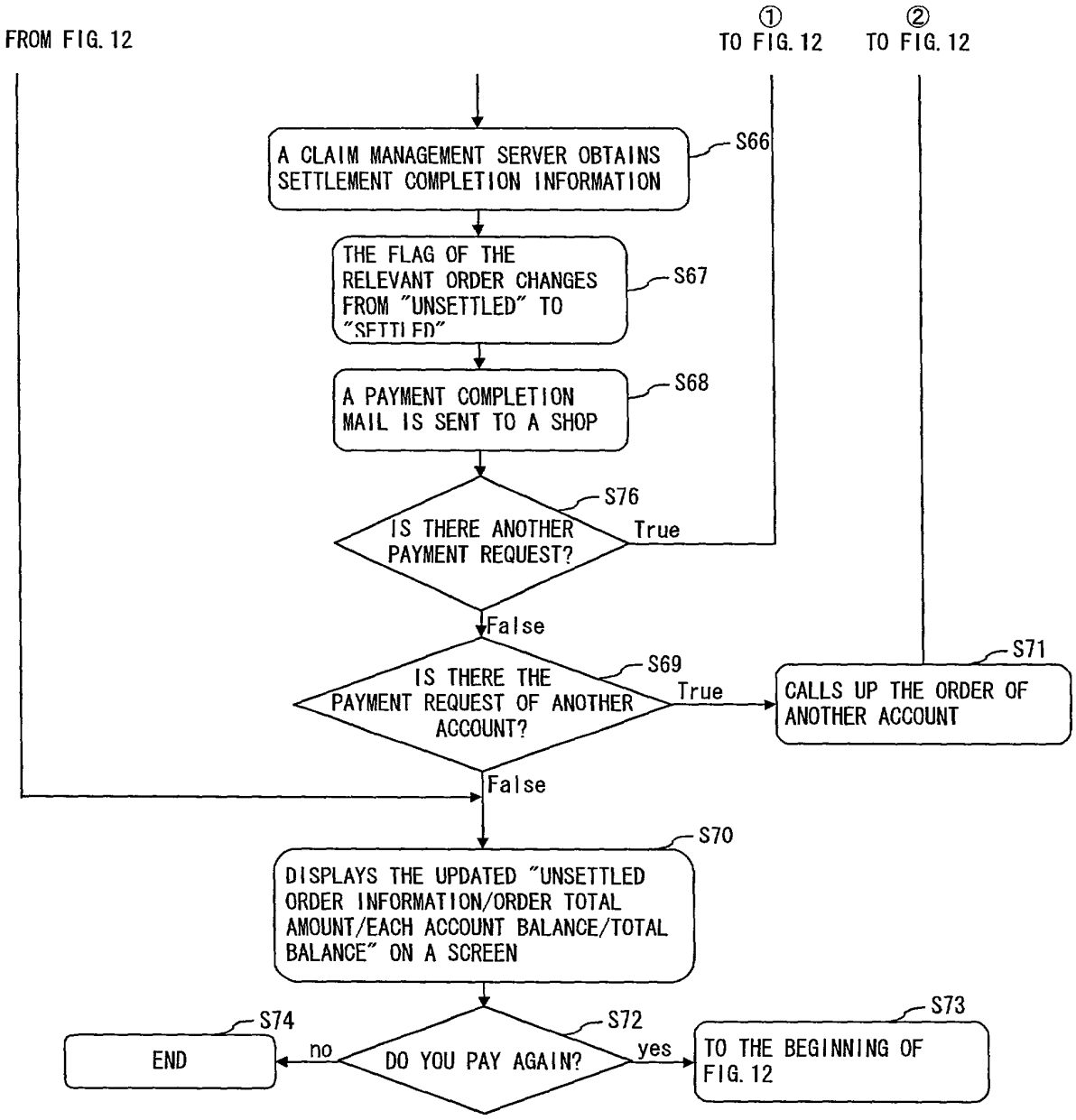

FROM FIG. 12
①
TO FIG. 12
②
TO FIG. 12
A CLAIM MANAGEMENT SERVER OBTAINS SETTLEMENT COMPLETION INFORMATION
S66
THE FLAG OF THE RELEVANT ORDER CHANGES FROM "UNSETTLED" TO "SETTLED"
S67
A PAYMENT COMPLETION MAIL IS SENT TO A SHOP
S68
S76
IS THERE ANOTHER PAYMENT REQUEST?
True
False
S69
IS THERE THE PAYMENT REQUEST OF ANOTHER ACCOUNT?
True
S71
CALLS UP THE ORDER OF ANOTHER ACCOUNT
False
S70
DISPLAYS THE UPDATED "UNSETTLED ORDER INFORMATION/ORDER TOTAL AMOUNT/EACH ACCOUNT BALANCE/TOTAL BALANCE" ON A SCREEN
S74
END
no
S72
DO YOU PAY AGAIN?
yes
S73
TO THE BEGINNING OF FIG. 12

FIG. 13

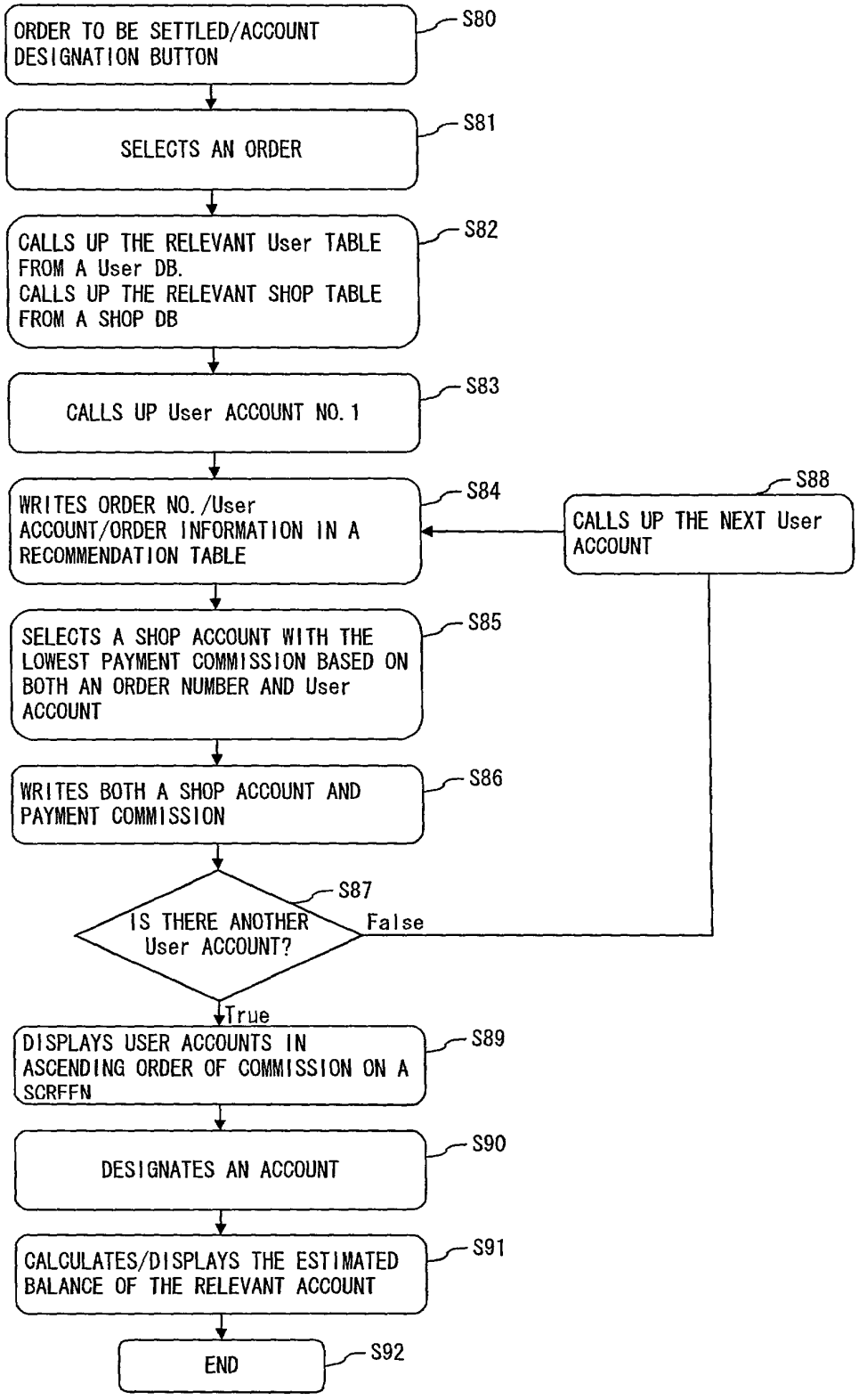

ORDER TO BE SETTLED/ACCOUNT DESIGNATION BUTTON
S80
SELECTS AN ORDER
S81
CALLS UP THE RELEVANT User TABLE FROM A User DB.
CALLS UP THE RELEVANT SHOP TABLE FROM A SHOP DB
S82
CALLS UP User ACCOUNT NO. 1
S83
WRITES ORDER NO./User ACCOUNT/ORDER INFORMATION IN A RECOMMENDATION TABLE
S84
CALLS UP THE NEXT User ACCOUNT
S88
SELECTS A SHOP ACCOUNT WITH THE LOWEST PAYMENT COMMISSION BASED ON BOTH AN ORDER NUMBER AND User ACCOUNT
S85
WRITES BOTH A SHOP ACCOUNT AND PAYMENT COMMISSION
S86
IS THERE ANOTHER User ACCOUNT?
S87
False
True
DISPLAYS USER ACCOUNTS IN ASCENDING ORDER OF COMMISSION ON A SCREEN
S89
DESIGNATES AN ACCOUNT
S90
CALCULATES/DISPLAYS THE ESTIMATED BALANCE OF THE RELEVANT ACCOUNT
S91
END
S92

FIG. 14

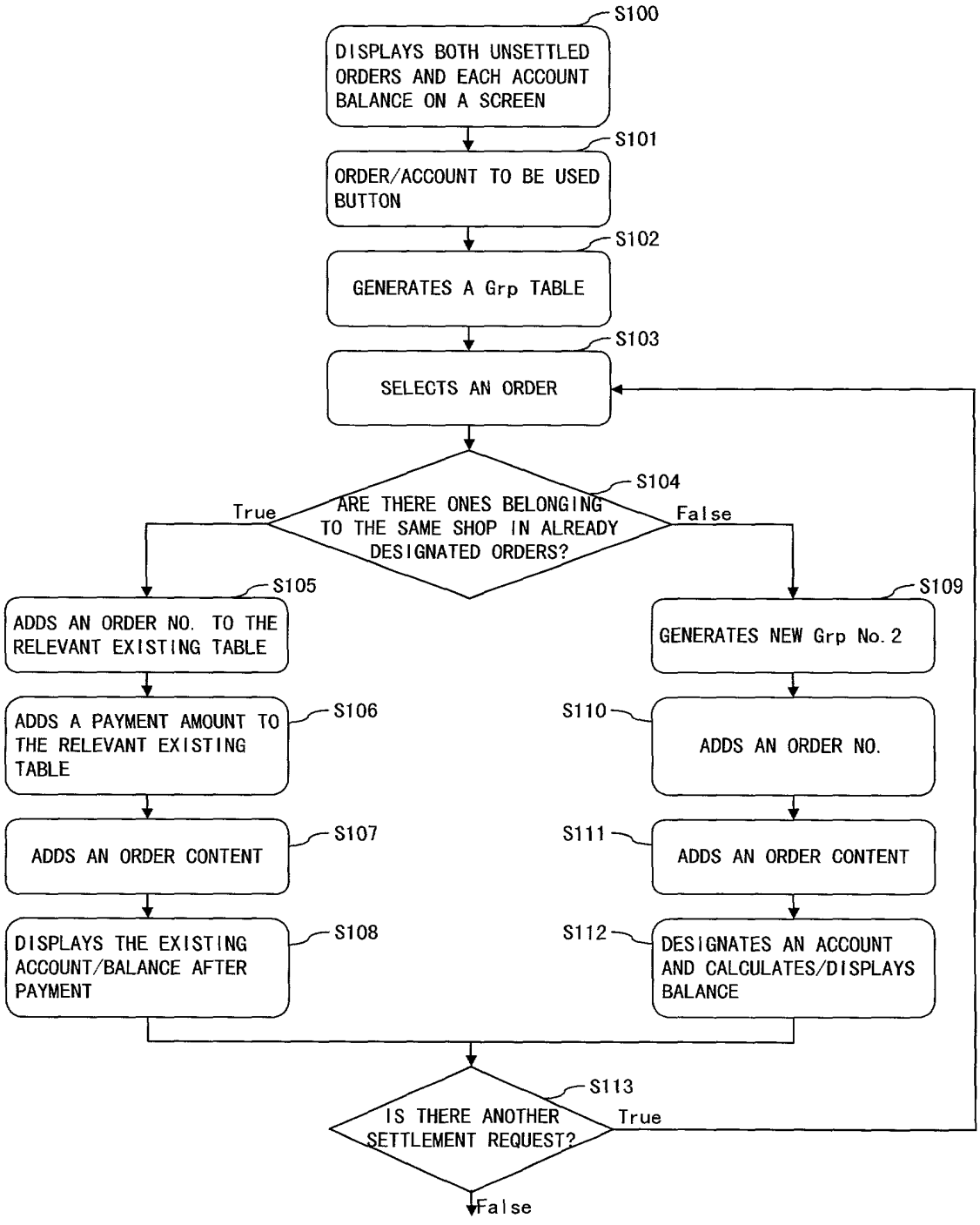

S100
DISPLAYS BOTH UNSETTLED ORDERS AND EACH ACCOUNT BALANCE ON A SCREEN
S101
ORDER/ACCOUNT TO BE USED BUTTON
S102
GENERATES A Grp TABLE
S103
SELECTS AN ORDER
S104
ARE THERE ONES BELONGING TO THE SAME SHOP IN ALREADY DESIGNATED ORDERS?
True
False
S105
ADDS AN ORDER NO. TO THE RELEVANT EXISTING TABLE
S106
ADDS A PAYMENT AMOUNT TO THE RELEVANT EXISTING TABLE
S107
ADDS AN ORDER CONTENT
S108
DISPLAYS THE EXISTING ACCOUNT/BALANCE AFTER PAYMENT
S109
GENERATES NEW Grp No. 2
S110
ADDS AN ORDER NO.
S111
ADDS AN ORDER CONTENT
S112
DESIGNATES AN ACCOUNT AND CALCULATES/DISPLAYS BALANCE
S113
IS THERE ANOTHER SETTLEMENT REQUEST?
True
False

FIG. 15

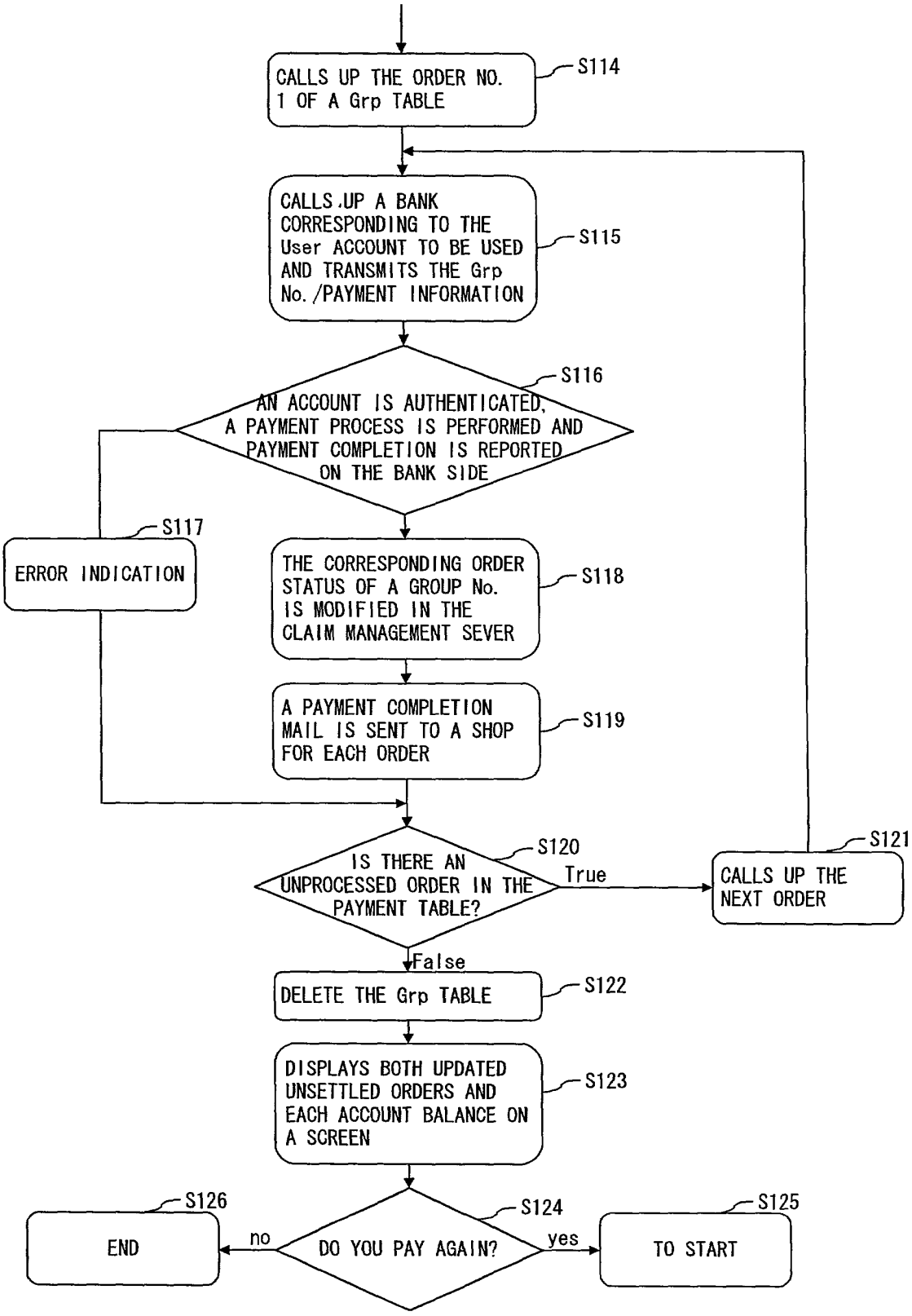

CALLS UP THE ORDER NO. 1 OF A Grp TABLE
S114
CALLS UP A BANK CORRESPONDING TO THE User ACCOUNT TO BE USED AND TRANSMITS THE Grp No./PAYMENT INFORMATION
S115
S116
AN ACCOUNT IS AUTHENTICATED, A PAYMENT PROCESS IS PERFORMED AND PAYMENT COMPLETION IS REPORTED ON THE BANK SIDE
S117
ERROR INDICATION
THE CORRESPONDING ORDER STATUS OF A GROUP No. IS MODIFIED IN THE CLAIM MANAGEMENT SEVER
S118
A PAYMENT COMPLETION MAIL IS SENT TO A SHOP FOR EACH ORDER
S119
S120
IS THERE AN UNPROCESSED ORDER IN THE PAYMENT TABLE?
True
CALLS UP THE NEXT ORDER
S121
False
DELETE THE Grp TABLE
S122
DISPLAYS BOTH UPDATED UNSETTLED ORDERS AND EACH ACCOUNT BALANCE ON A SCREEN
S123
S126
END
no
S124
DO YOU PAY AGAIN?
yes
S125
TO START

FIG. 16

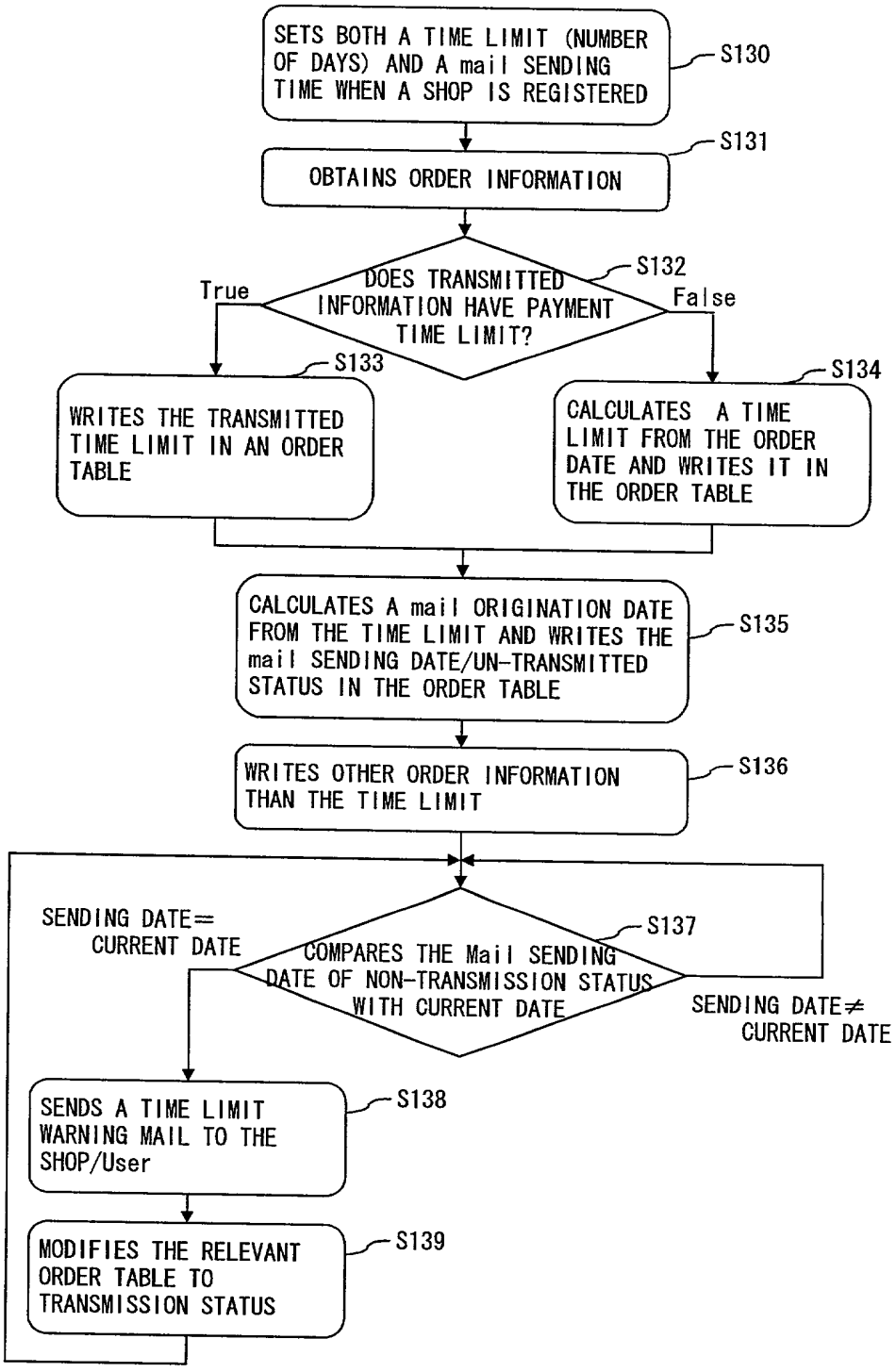

SETS BOTH A TIME LIMIT (NUMBER OF DAYS) AND A mail SENDING TIME WHEN A SHOP IS REGISTERED
S130
OBTAINS ORDER INFORMATION
S131
DOES TRANSMITTED INFORMATION HAVE PAYMENT TIME LIMIT?
S132
True
False
WRITES THE TRANSMITTED TIME LIMIT IN AN ORDER TABLE
S133
CALCULATES A TIME LIMIT FROM THE ORDER DATE AND WRITES IT IN THE ORDER TABLE
S134
CALCULATES A mail ORIGINATION DATE FROM THE TIME LIMIT AND WRITES THE mail SENDING DATE/UN-TRANSMITTED STATUS IN THE ORDER TABLE
S135
WRITES OTHER ORDER INFORMATION THAN THE TIME LIMIT
S136
SENDING DATE= CURRENT DATE
COMPARES THE Mail SENDING DATE OF NON-TRANSMISSION STATUS WITH CURRENT DATE
S137
SENDING DATE≠ CURRENT DATE
SENDS A TIME LIMIT WARNING MAIL TO THE SHOP/User
S138
MODIFIES THE RELEVANT ORDER TABLE TO TRANSMISSION STATUS
S139

FIG. 17

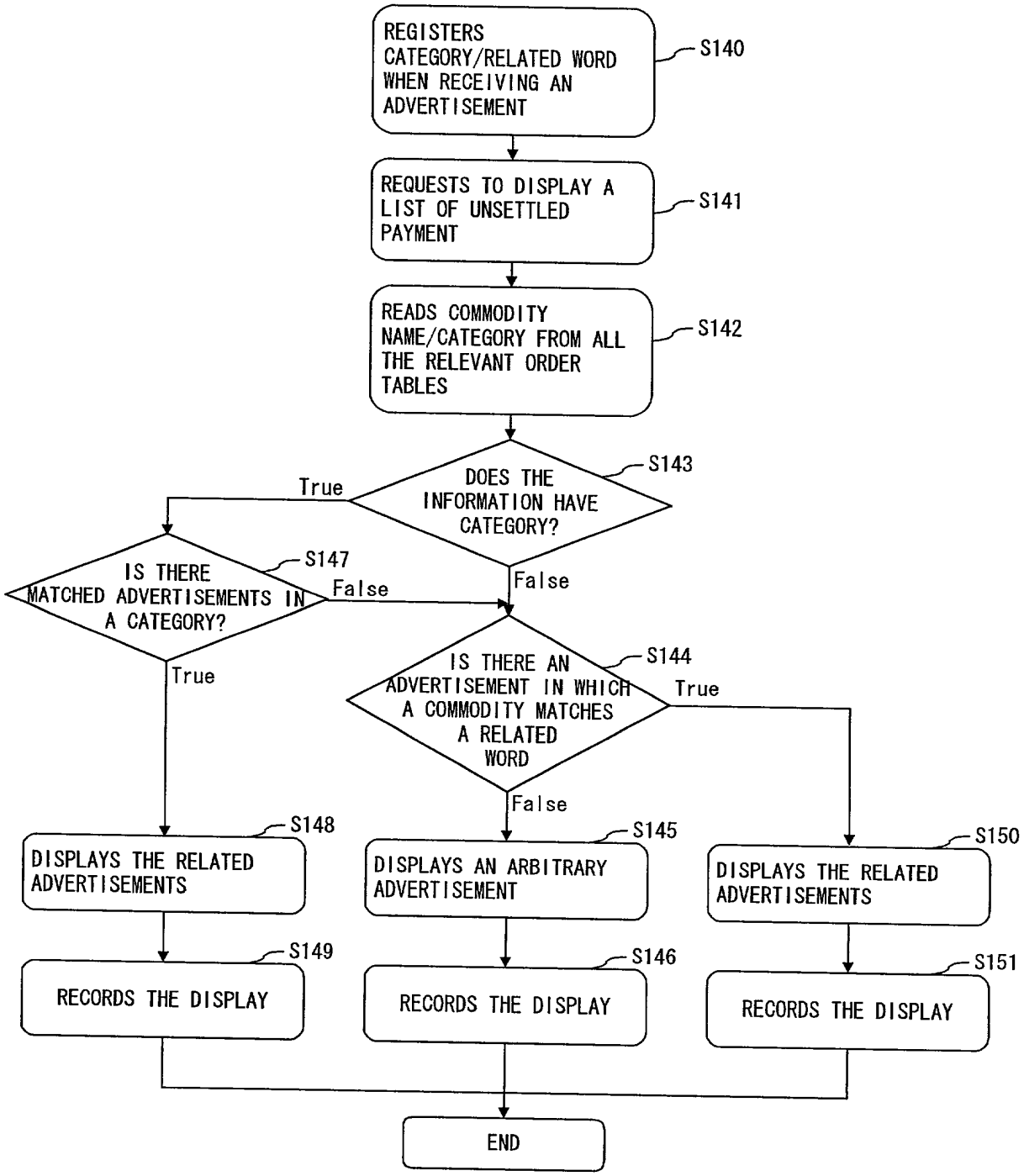

REGISTERS CATEGORY/RELATED WORD WHEN RECEIVING AN ADVERTISEMENT
S140
REQUESTS TO DISPLAY A LIST OF UNSETTLED PAYMENT
S141
READS COMMODITY NAME/CATEGORY FROM ALL THE RELEVANT ORDER TABLES
S142
DOES THE INFORMATION HAVE CATEGORY?
S143
True
False
IS THERE MATCHED ADVERTISEMENTS IN A CATEGORY?
S147
False
True
IS THERE AN ADVERTISEMENT IN WHICH A COMMODITY MATCHES A RELATED WORD
S144
True
False
DISPLAYS THE RELATED ADVERTISEMENTS
S148
DISPLAYS AN ARBITRARY ADVERTISEMENT
S145
DISPLAYS THE RELATED ADVERTISEMENTS
S150
RECORDS THE DISPLAY
S149
RECORDS THE DISPLAY
S146
RECORDS THE DISPLAY
S151
END

FIG. 18

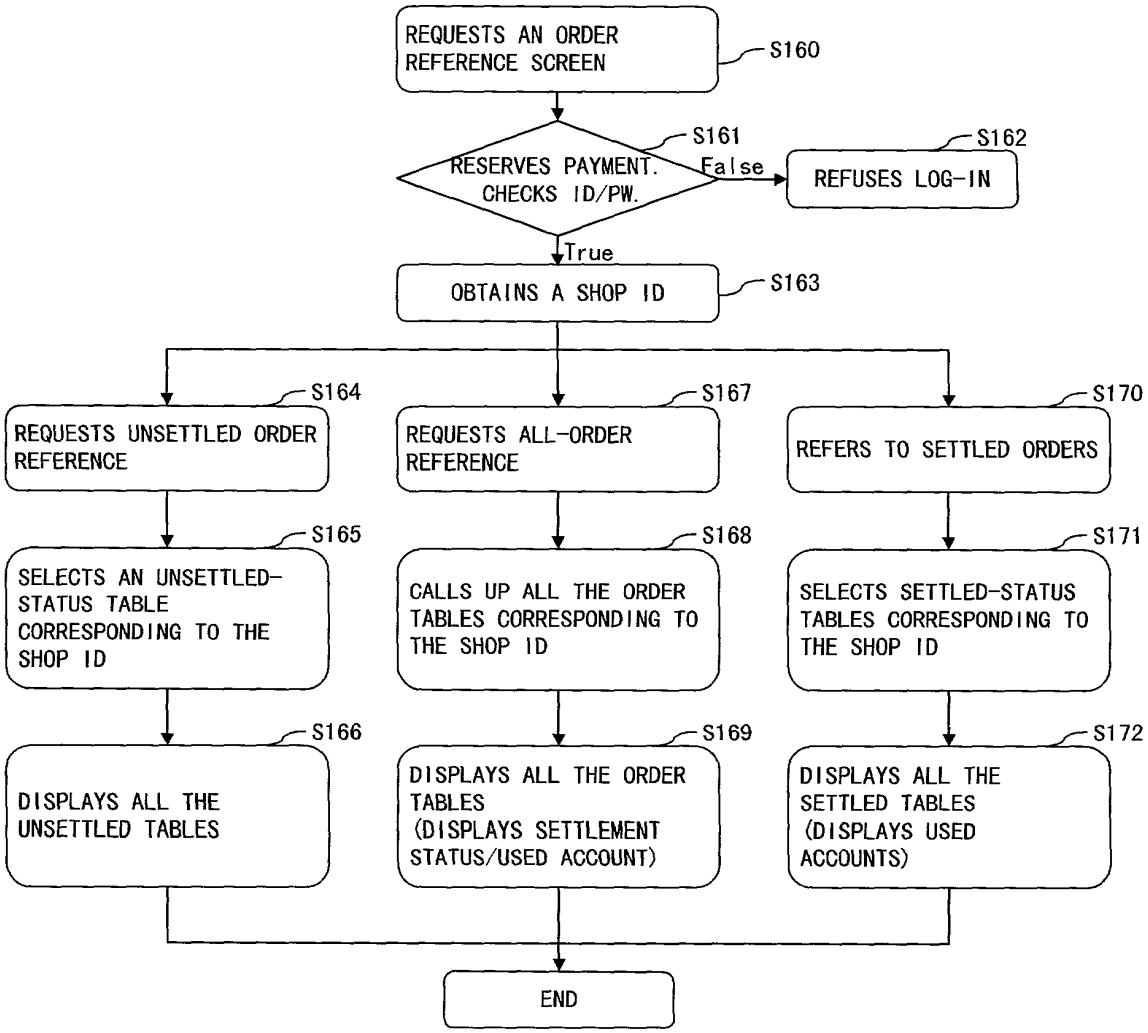

REQUESTS AN ORDER REFERENCE SCREEN
S160
RESERVES PAYMENT. CHECKS ID/PW.
S161
False
REFUSES LOG-IN
S162
True
OBTAINS A SHOP ID
S163
REQUESTS UNSETTLED ORDER REFERENCE
S164
REQUESTS ALL-ORDER REFERENCE
S167
REFERS TO SETTLED ORDERS
S170
SELECTS AN UNSETTLED-STATUS TABLE CORRESPONDING TO THE SHOP ID
S165
CALLS UP ALL THE ORDER TABLES CORRESPONDING TO THE SHOP ID
S168
SELECTS SETTLED-STATUS TABLES CORRESPONDING TO THE SHOP ID
S171
DISPLAYS ALL THE UNSETTLED TABLES
S166
DISPLAYS ALL THE ORDER TABLES (DISPLAYS SETTLEMENT STATUS/USED ACCOUNT)
S169
DISPLAYS ALL THE SETTLED TABLES (DISPLAYS USED ACCOUNTS)
S172
END

FIG. 19

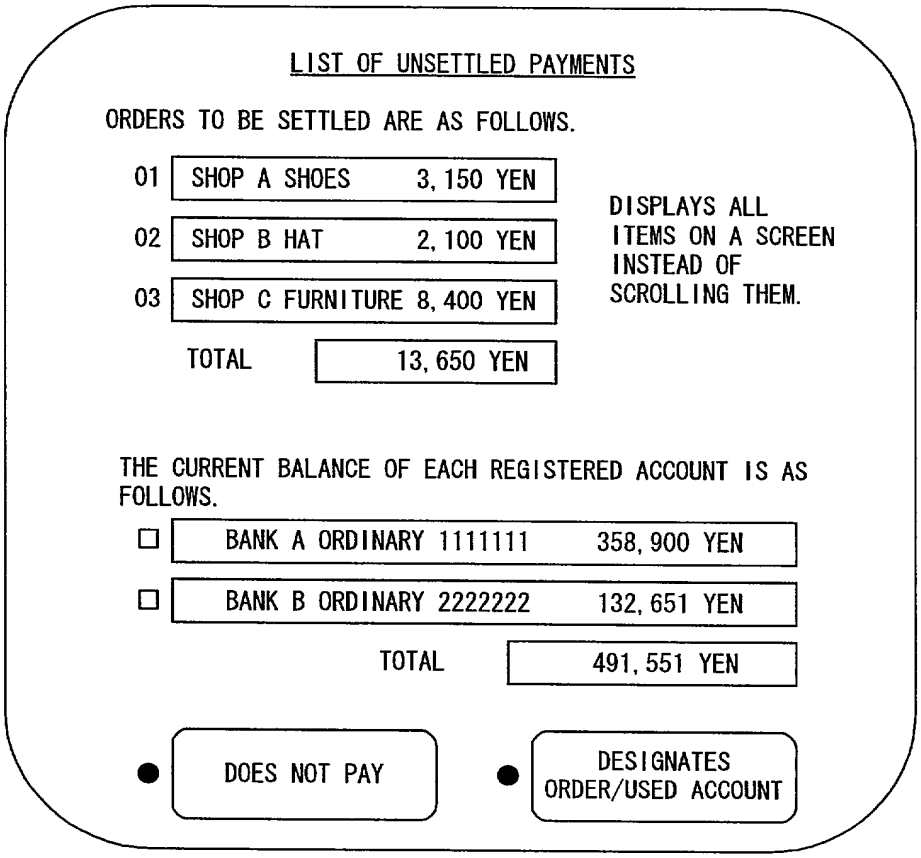

LIST OF UNSETTLED PAYMENTS
ORDERS TO BE SETTLED ARE AS FOLLOWS.
01 SHOP A SHOES 3,150 YEN
02 SHOP B HAT 2,100 YEN
03 SHOP C FURNITURE 8,400 YEN
TOTAL 13,650 YEN
DISPLAYS ALL ITEMS ON A SCREEN INSTEAD OF SCROLLING THEM.
THE CURRENT BALANCE OF EACH REGISTERED ACCOUNT IS AS FOLLOWS.
BANK A ORDINARY 1111111 358,900 YEN
BANK B ORDINARY 2222222 132,651 YEN
TOTAL 491,551 YEN
DOES NOT PAY
DESIGNATES ORDER/USED ACCOUNT

FIG. 20

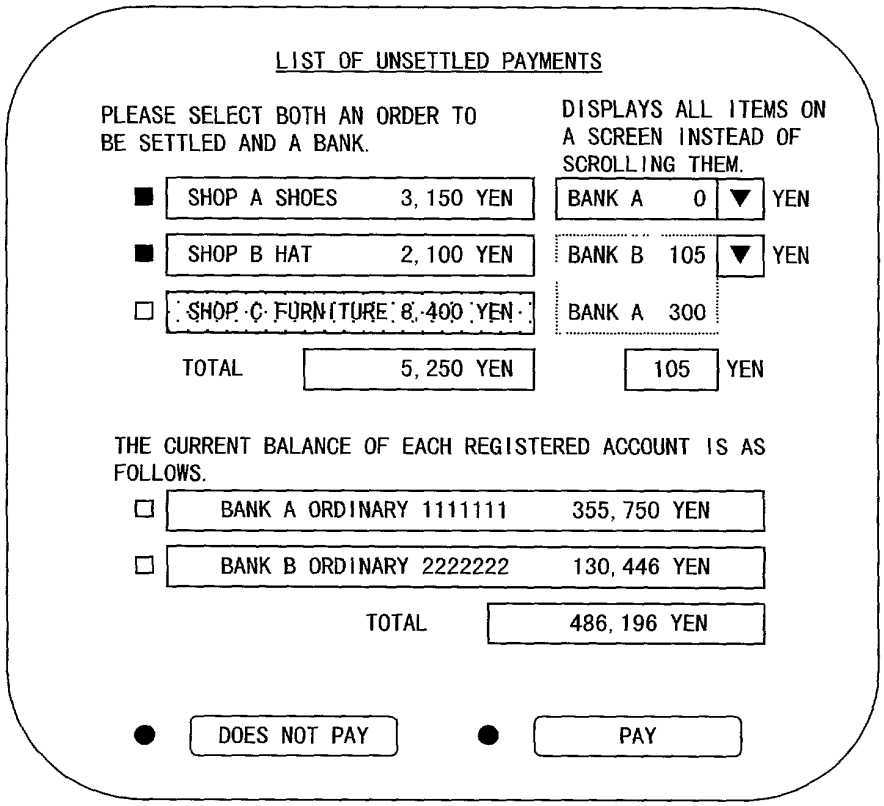

LIST OF UNSETTLED PAYMENTS
PLEASE SELECT BOTH AN ORDER TO BE SETTLED AND A BANK.
DISPLAYS ALL ITEMS ON A SCREEN INSTEAD OF SCROLLING THEM.
SHOP A SHOES 3,150 YEN
BANK A 0 YEN
SHOP B HAT 2,100 YEN
BANK B 105 YEN
SHOP C FURNITURE 8,400 YEN
BANK A 300
TOTAL 5,250 YEN
105 YEN
THE CURRENT BALANCE OF EACH REGISTERED ACCOUNT IS AS FOLLOWS.
BANK A ORDINARY 1111111 355,750 YEN
BANK B ORDINARY 2222222 130,446 YEN
TOTAL 486,196 YEN
DOES NOT PAY
PAY

FIG. 21

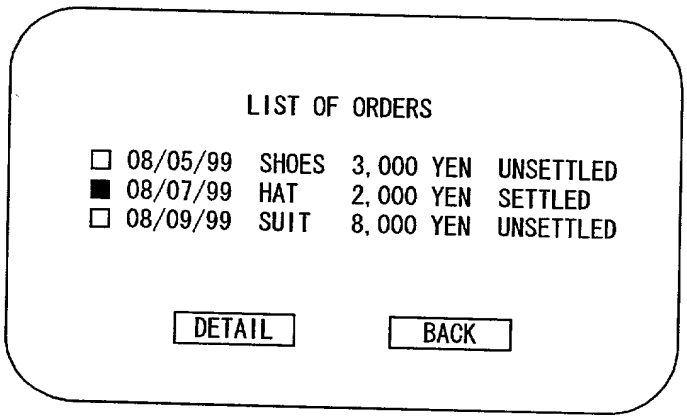

LIST OF ORDERS
☐ 08/05/99 SHOES 3,000 YEN UNSETTLED
■ 08/07/99 HAT 2,000 YEN SETTLED
☐ 08/09/99 SUIT 8,000 YEN UNSETTLED
DETAIL
BACK

FIG. 22

● USER TABLE

- User ID
- User INFORMATION (INFORMATION REQUIRED TO PAY: NAME, ADDRESS, PHONE NO., etc.)
- User ACCOUNT 1 (BANK NAME, BRANCH NAME, ACCOUNT NO.)
  .
  .
- User ACCOUNT

FIG. 23A

● SHOP TABLE

- SHOP ID
- SHOP INFORMATION (INFORMATION REQUIRED TO PAY: NAME, ADDRESS, PHONE NO., etc.)
- SHOP ACCOUNT 1 (BANK NAME, BRANCH NAME, ACCOUNT NO.)
  .
  .
- SHOP ACCOUNT

FIG. 23B

● PAYMENT COMMISSION TABLE

- BAKE NAME
- COMMISSION (THE SAME BANK, THE SAME BRANCH, PAYMENT AMOUNT RANGE)
- COMMISSION (THE SAME BANK, PAYMENT AMOUNT RANGE)
- COMMISSION (COOPERATED BANK, PAYMENT AMOUNT RANGE)
- COMMISSION (OTHER BANK, PAYMENT AMOUNT RANGE)
  .... etc.

FIG. 23C

● ORDER TABLE

- ORDER NO.
- User ID
- SHOP ID
- ORDER INFORMATION (CATEGORY, COMMODITY NAME, AMOUNT, PAYMENT TIME LIMIT, etc.)
- User ACCOUNT (INCLUDING BOTH A BANK NAME AND A BRANCH NAME)
- SHOP ACCOUNT (INCLUDING BOTH A BANK NAME AND A BRANCH NAME)
- STATUS (PAYMENT UNSETTLED/PAYMENT COMPLETED)

FIG. 23D

● Grp TABLE

- Grp NO.
- ORDER NO. (PLURAL AVAILABLE)
- User ACCOUNT (BANK NAME AND BRANCH NAME)
- SHOP ACCOUNT (BANK NAME AND BRANCH NAME)
- ORDER INFORMATION (NAME OF COMMODITY, AMOUNT, etc. : PLURAL AVAILABLE)

FIG. 24A

● ADVERTISEMENT TABLE

- ADVERTISEMENT ID
- REGISTRATION CATEGORY
- REGISTRATION KEYWORD

FIG. 24B

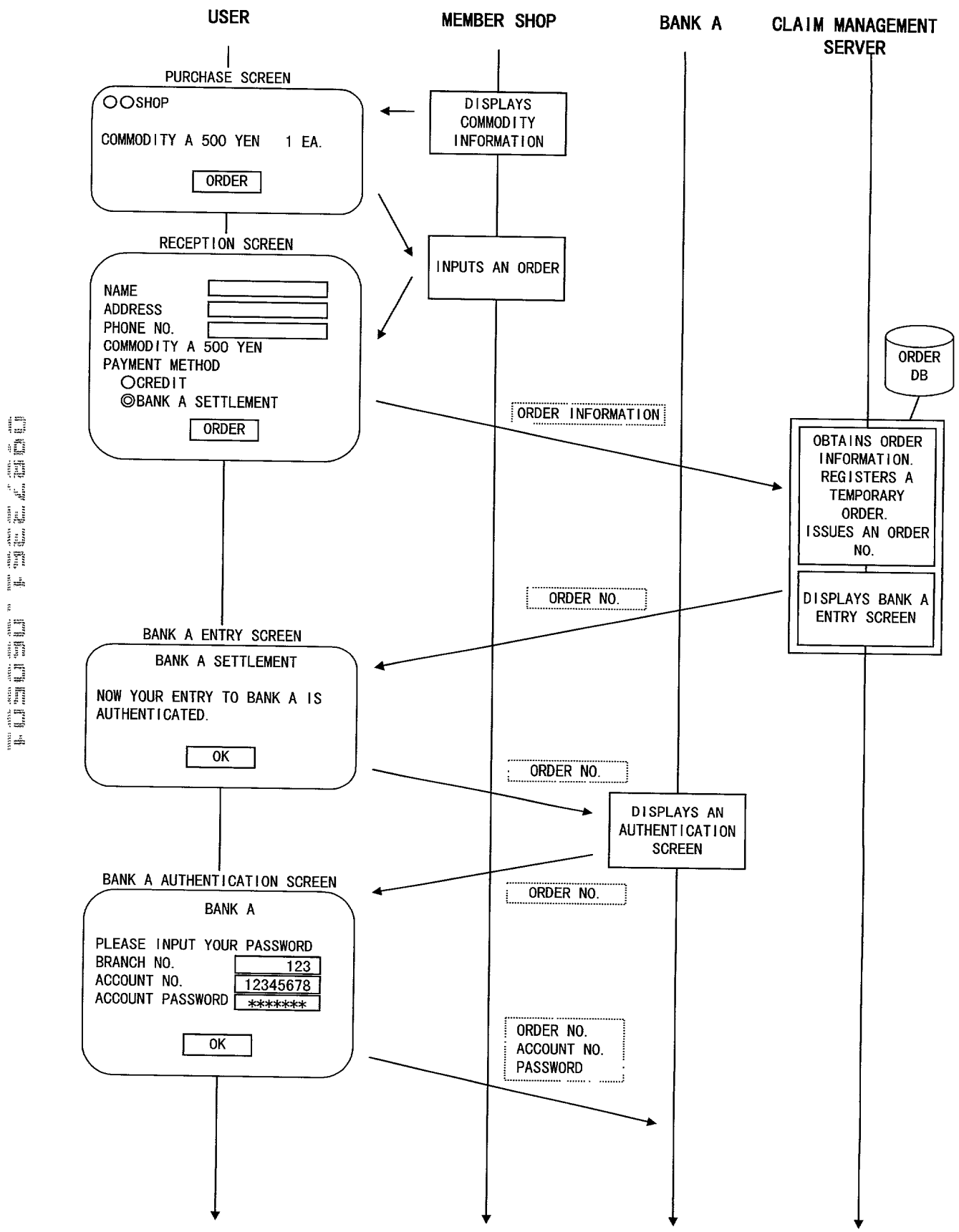

USER
MEMBER SHOP
BANK A
CLAIM MANAGEMENT SERVER
PURCHASE SCREEN
○○SHOP
COMMODITY A 500 YEN 1 EA.
ORDER
DISPLAYS COMMODITY INFORMATION
RECEPTION SCREEN
NAME
ADDRESS
PHONE NO.
COMMODITY A 500 YEN
PAYMENT METHOD
○CREDIT
◎BANK A SETTLEMENT
ORDER
INPUTS AN ORDER
ORDER DB
ORDER INFORMATION
OBTAINS ORDER INFORMATION. REGISTERS A TEMPORARY ORDER. ISSUES AN ORDER NO.
ORDER NO.
DISPLAYS BANK A ENTRY SCREEN
BANK A ENTRY SCREEN
BANK A SETTLEMENT
NOW YOUR ENTRY TO BANK A IS AUTHENTICATED.
OK
ORDER NO.
DISPLAYS AN AUTHENTICATION SCREEN
BANK A AUTHENTICATION SCREEN
BANK A
PLEASE INPUT YOUR PASSWORD
BRANCH NO. 123
ACCOUNT NO. 12345678
ACCOUNT PASSWORD ******
OK
ORDER NO.
ORDER NO.
ACCOUNT NO.
PASSWORD

FIG. 25

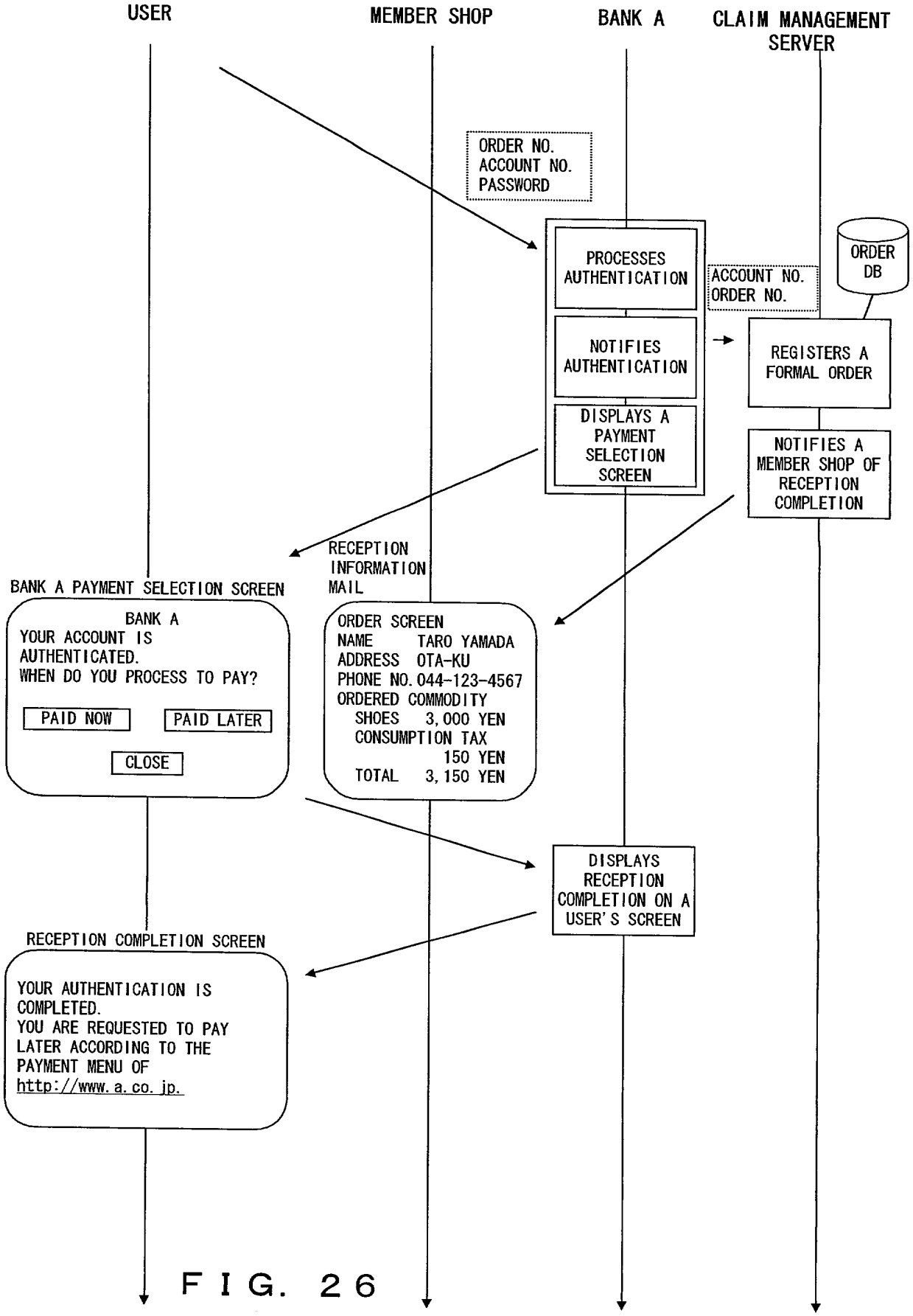

USER
MEMBER SHOP
BANK A
CLAIM MANAGEMENT SERVER
ORDER NO.
ACCOUNT NO.
PASSWORD
PROCESSES AUTHENTICATION
NOTIFIES AUTHENTICATION
DISPLAYS A PAYMENT SELECTION SCREEN
ACCOUNT NO.
ORDER NO.
ORDER DB
REGISTERS A FORMAL ORDER
NOTIFIES A MEMBER SHOP OF RECEPTION COMPLETION
RECEPTION INFORMATION MAIL
BANK A PAYMENT SELECTION SCREEN
BANK A
YOUR ACCOUNT IS AUTHENTICATED.
WHEN DO YOU PROCESS TO PAY?
PAID NOW
PAID LATER
CLOSE
ORDER SCREEN
NAME TARO YAMADA
ADDRESS OTA-KU
PHONE NO. 044-123-4567
ORDERED COMMODITY
SHOES 3,000 YEN
CONSUMPTION TAX 150 YEN
TOTAL 3,150 YEN
DISPLAYS RECEPTION COMPLETION ON A USER'S SCREEN
RECEPTION COMPLETION SCREEN
YOUR AUTHENTICATION IS COMPLETED.
YOU ARE REQUESTED TO PAY LATER ACCORDING TO THE PAYMENT MENU OF
http://www.a.co.jp.

FIG. 26

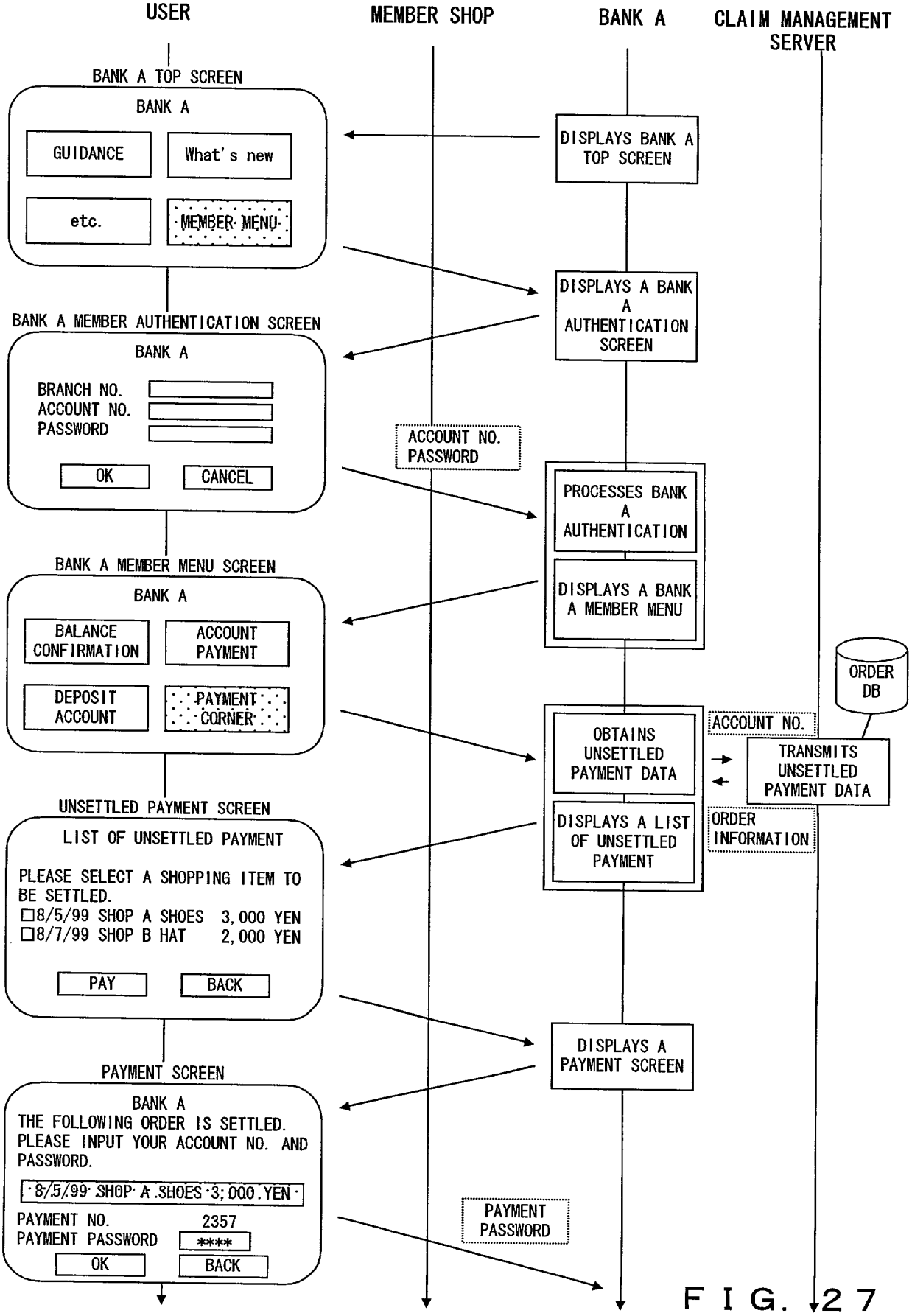

USER
MEMBER SHOP
BANK A
CLAIM MANAGEMENT SERVER
BANK A TOP SCREEN
BANK A
GUIDANCE
What's new
etc.
MEMBER MENU
DISPLAYS BANK A TOP SCREEN
DISPLAYS A BANK A AUTHENTICATION SCREEN
BANK A MEMBER AUTHENTICATION SCREEN
BANK A
BRANCH NO.
ACCOUNT NO.
PASSWORD
OK
CANCEL
ACCOUNT NO.
PASSWORD
PROCESSES BANK A AUTHENTICATION
DISPLAYS A BANK A MEMBER MENU
BANK A MEMBER MENU SCREEN
BANK A
BALANCE CONFIRMATION
ACCOUNT PAYMENT
DEPOSIT ACCOUNT
PAYMENT CORNER
ORDER DB
OBTAINS UNSETTLED PAYMENT DATA
ACCOUNT NO.
TRANSMITS UNSETTLED PAYMENT DATA
DISPLAYS A LIST OF UNSETTLED PAYMENT
ORDER INFORMATION
UNSETTLED PAYMENT SCREEN
LIST OF UNSETTLED PAYMENT
PLEASE SELECT A SHOPPING ITEM TO BE SETTLED.
☐8/5/99 SHOP A SHOES 3,000 YEN
☐8/7/99 SHOP B HAT 2,000 YEN
PAY
BACK
DISPLAYS A PAYMENT SCREEN
PAYMENT SCREEN
BANK A
THE FOLLOWING ORDER IS SETTLED.
PLEASE INPUT YOUR ACCOUNT NO. AND PASSWORD.
8/5/99 SHOP A SHOES 3,000 YEN
PAYMENT NO. 2357
PAYMENT PASSWORD ****
OK
BACK
PAYMENT PASSWORD

FIG. 27

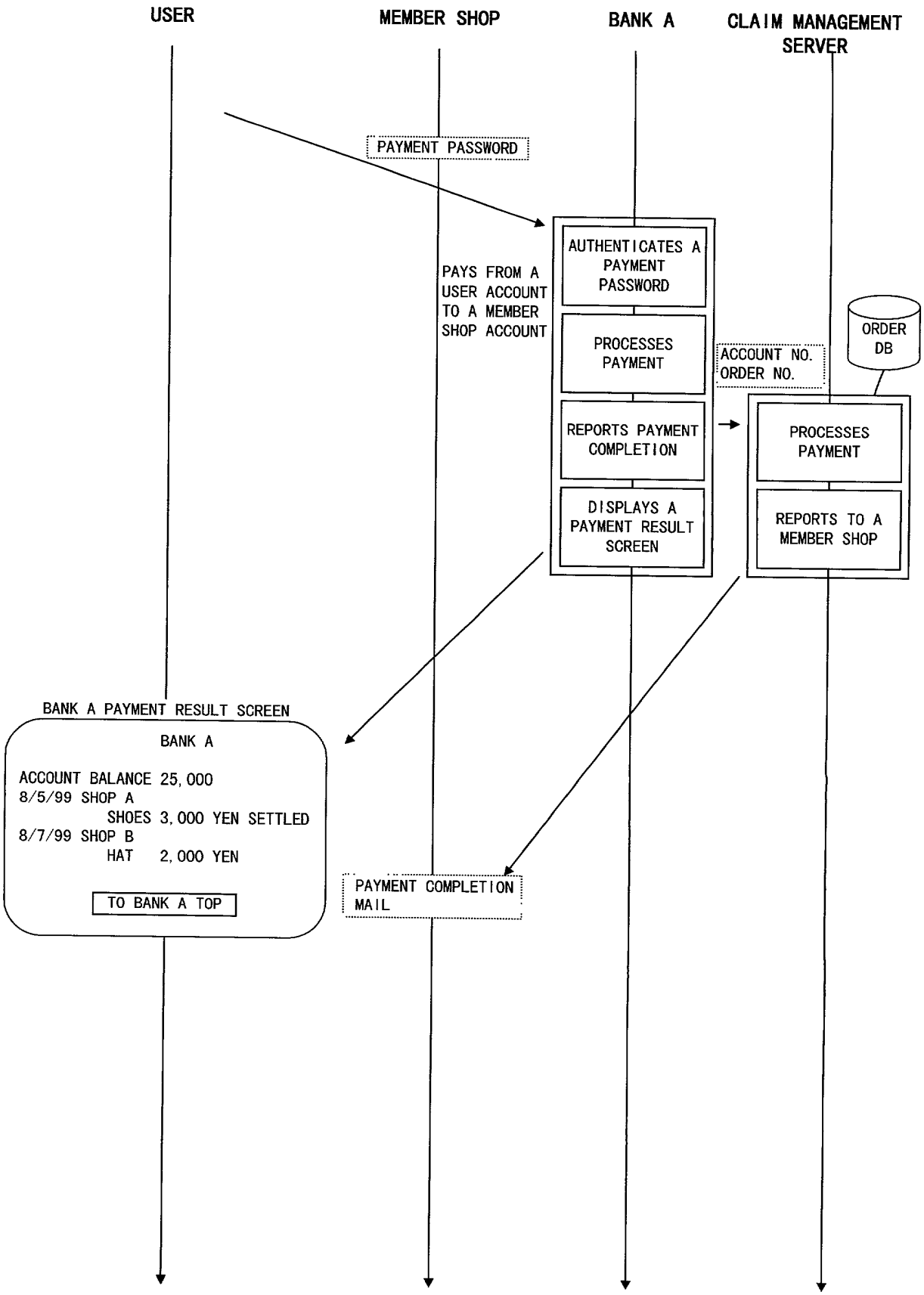

USER
MEMBER SHOP
BANK A
CLAIM MANAGEMENT SERVER
PAYMENT PASSWORD
PAYS FROM A USER ACCOUNT TO A MEMBER SHOP ACCOUNT
AUTHENTICATES A PAYMENT PASSWORD
PROCESSES PAYMENT
REPORTS PAYMENT COMPLETION
DISPLAYS A PAYMENT RESULT SCREEN
ACCOUNT NO.
ORDER NO.
ORDER DB
PROCESSES PAYMENT
REPORTS TO A MEMBER SHOP
BANK A PAYMENT RESULT SCREEN
BANK A
ACCOUNT BALANCE 25,000
8/5/99 SHOP A
SHOES 3,000 YEN SETTLED
8/7/99 SHOP B
HAT 2,000 YEN
TO BANK A TOP
PAYMENT COMPLETION MAIL

FIG. 28

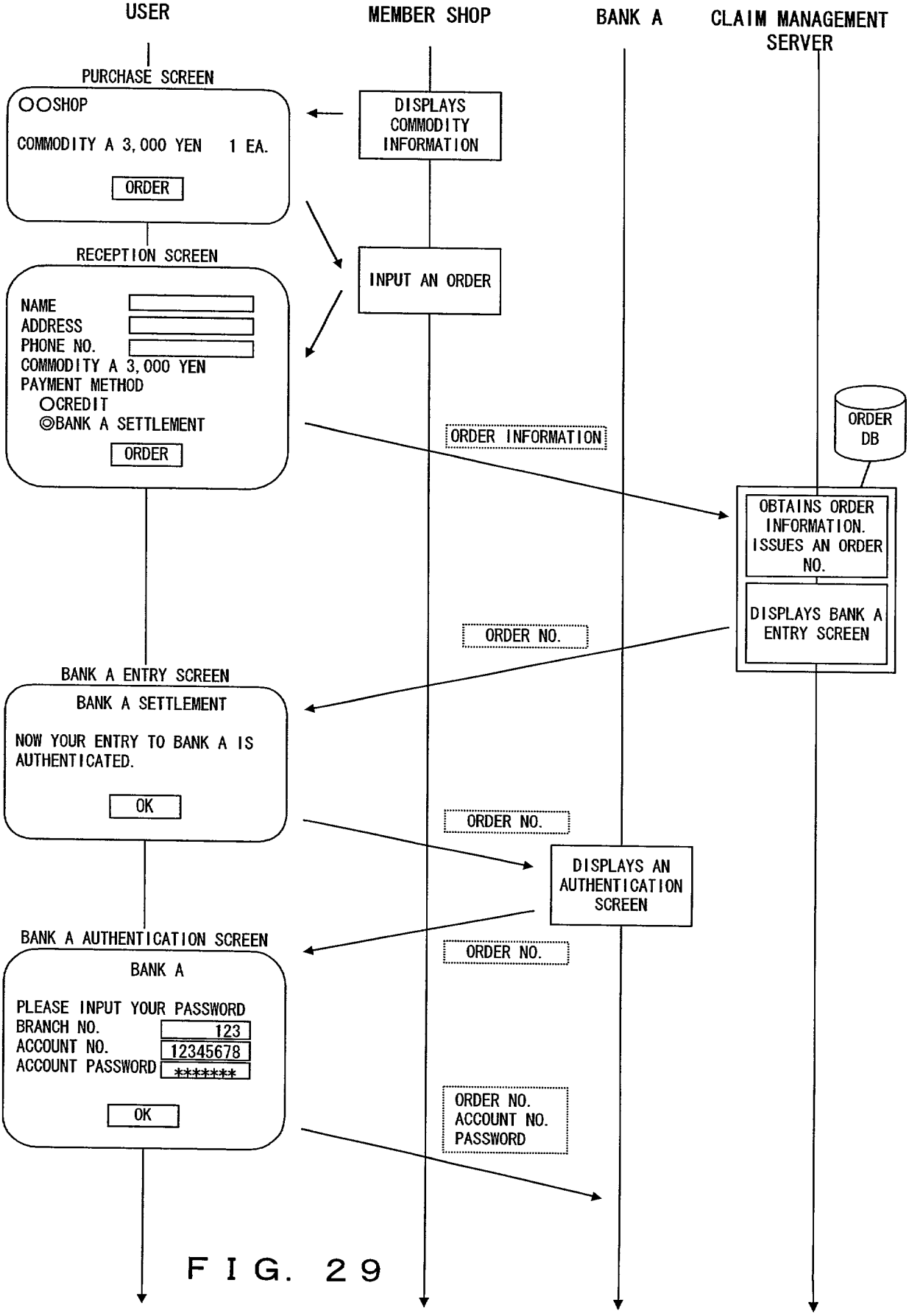

USER
MEMBER SHOP
BANK A
CLAIM MANAGEMENT SERVER
PURCHASE SCREEN
OOSHOP
COMMODITY A 3,000 YEN 1 EA.
ORDER
DISPLAYS COMMODITY INFORMATION
RECEPTION SCREEN
NAME
ADDRESS
PHONE NO.
COMMODITY A 3,000 YEN
PAYMENT METHOD
OCREDIT
◎BANK A SETTLEMENT
ORDER
INPUT AN ORDER
ORDER INFORMATION
ORDER DB
OBTAINS ORDER INFORMATION. ISSUES AN ORDER NO.
DISPLAYS BANK A ENTRY SCREEN
ORDER NO.
BANK A ENTRY SCREEN
BANK A SETTLEMENT
NOW YOUR ENTRY TO BANK A IS AUTHENTICATED.
OK
ORDER NO.
DISPLAYS AN AUTHENTICATION SCREEN
BANK A AUTHENTICATION SCREEN
BANK A
PLEASE INPUT YOUR PASSWORD
BRANCH NO. 123
ACCOUNT NO. 12345678
ACCOUNT PASSWORD *******
OK
ORDER NO.
ACCOUNT NO.
PASSWORD

FIG. 29

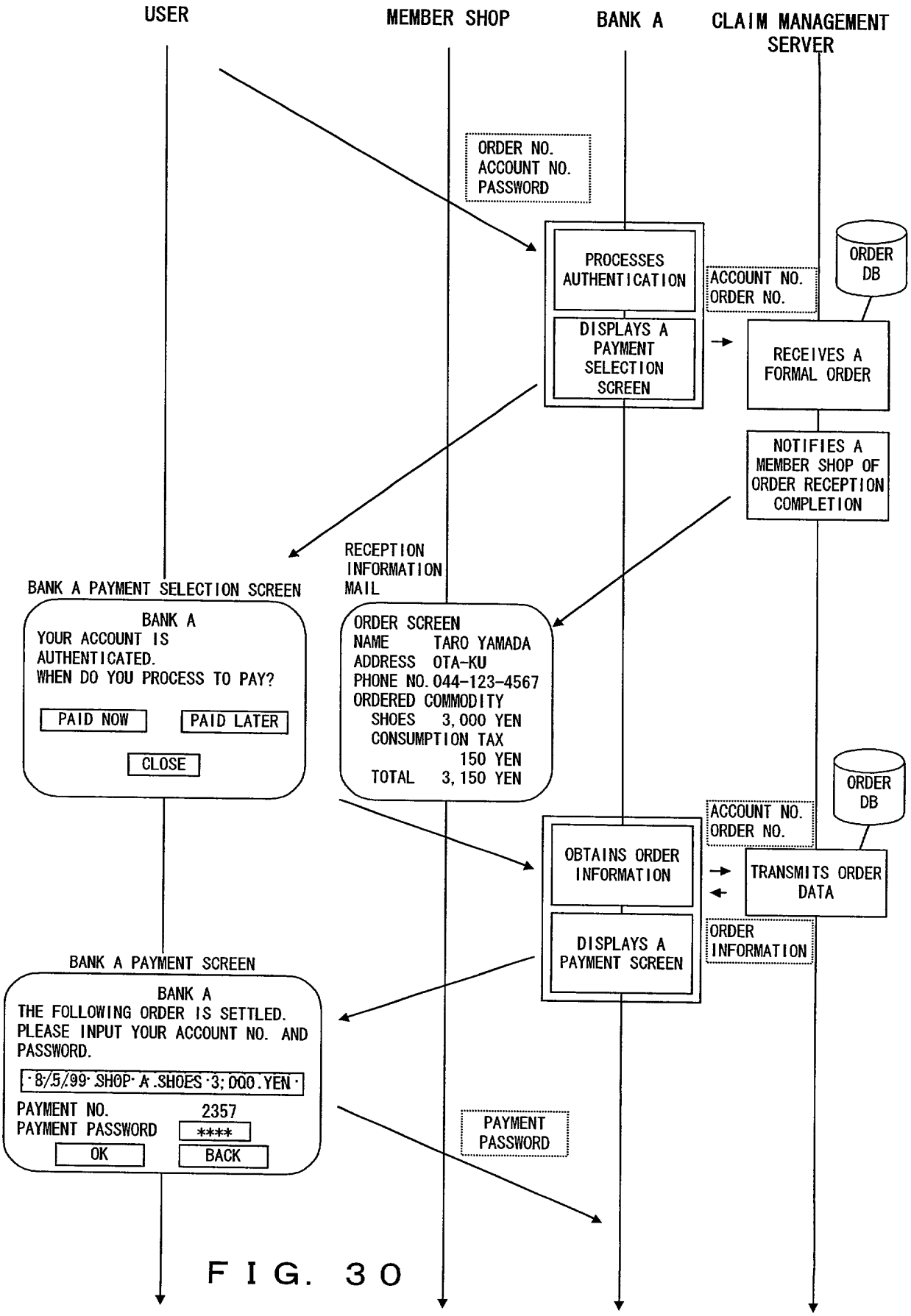

USER
MEMBER SHOP
BANK A
CLAIM MANAGEMENT SERVER
ORDER NO.
ACCOUNT NO.
PASSWORD
PROCESSES AUTHENTICATION
DISPLAYS A PAYMENT SELECTION SCREEN
ACCOUNT NO.
ORDER NO.
ORDER DB
RECEIVES A FORMAL ORDER
NOTIFIES A MEMBER SHOP OF ORDER RECEPTION COMPLETION
RECEPTION INFORMATION MAIL
BANK A PAYMENT SELECTION SCREEN
BANK A
YOUR ACCOUNT IS AUTHENTICATED.
WHEN DO YOU PROCESS TO PAY?
PAID NOW
PAID LATER
CLOSE
ORDER SCREEN
NAME TARO YAMADA
ADDRESS OTA-KU
PHONE NO. 044-123-4567
ORDERED COMMODITY
SHOES 3,000 YEN
CONSUMPTION TAX 150 YEN
TOTAL 3,150 YEN
ORDER DB
ACCOUNT NO.
ORDER NO.
OBTAINS ORDER INFORMATION
TRANSMITS ORDER DATA
DISPLAYS A PAYMENT SCREEN
ORDER INFORMATION
BANK A PAYMENT SCREEN
BANK A
THE FOLLOWING ORDER IS SETTLED.
PLEASE INPUT YOUR ACCOUNT NO. AND PASSWORD.
·8/5/99·SHOP·A·SHOES·3;000·YEN·
PAYMENT NO. 2357
PAYMENT PASSWORD ****
OK
BACK
PAYMENT PASSWORD

FIG. 30

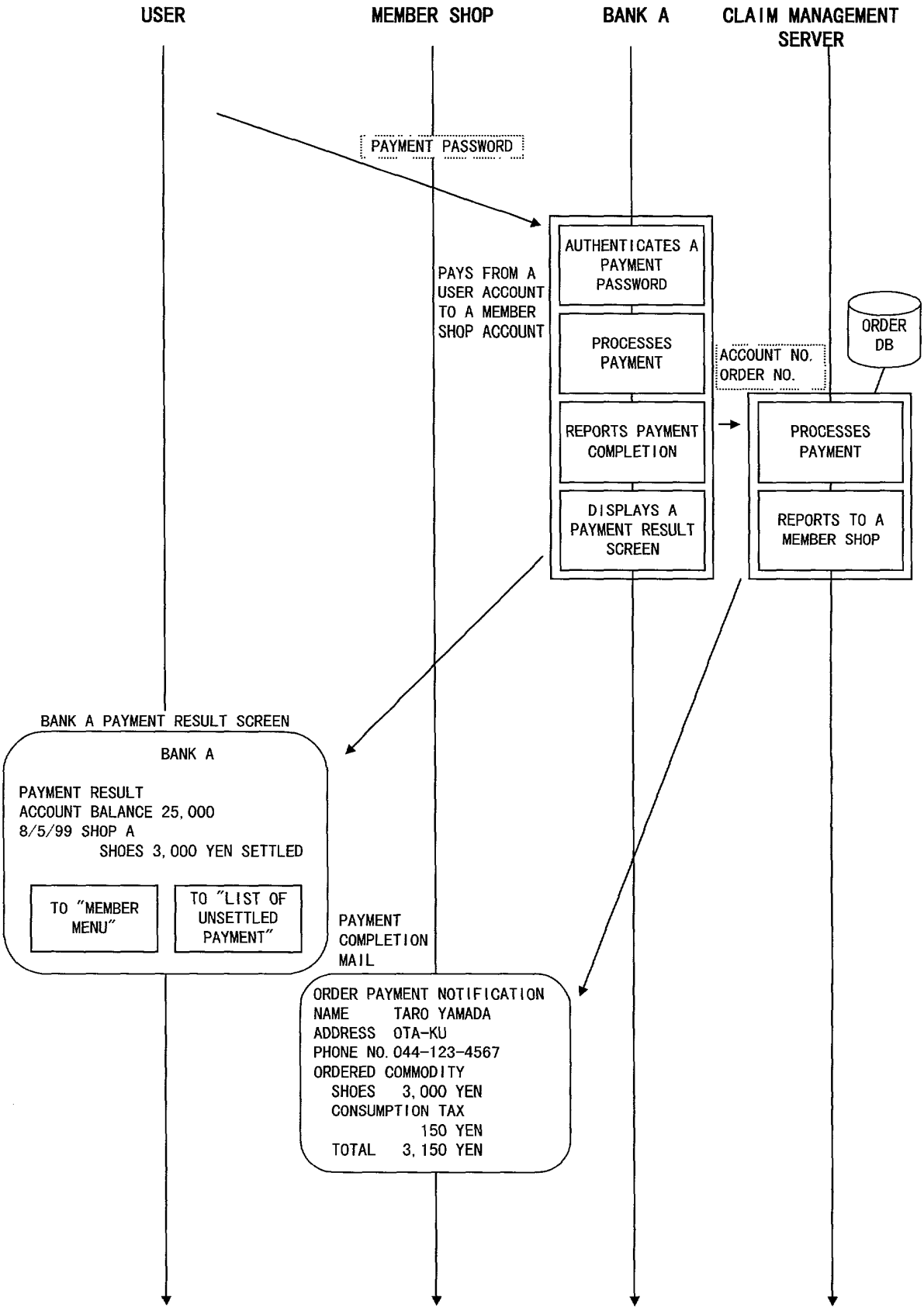

USER
MEMBER SHOP
BANK A
CLAIM MANAGEMENT SERVER
PAYMENT PASSWORD
AUTHENTICATES A PAYMENT PASSWORD
PAYS FROM A USER ACCOUNT TO A MEMBER SHOP ACCOUNT
PROCESSES PAYMENT
REPORTS PAYMENT COMPLETION
DISPLAYS A PAYMENT RESULT SCREEN
ORDER DB
ACCOUNT NO.
ORDER NO.
PROCESSES PAYMENT
REPORTS TO A MEMBER SHOP
BANK A PAYMENT RESULT SCREEN
BANK A
PAYMENT RESULT
ACCOUNT BALANCE 25,000
8/5/99 SHOP A
SHOES 3,000 YEN SETTLED
TO "MEMBER MENU"
TO "LIST OF UNSETTLED PAYMENT"
PAYMENT COMPLETION MAIL
ORDER PAYMENT NOTIFICATION
NAME TARO YAMADA
ADDRESS OTA-KU
PHONE NO. 044-123-4567
ORDERED COMMODITY
SHOES 3,000 YEN
CONSUMPTION TAX
150 YEN
TOTAL 3,150 YEN

FIG. 31

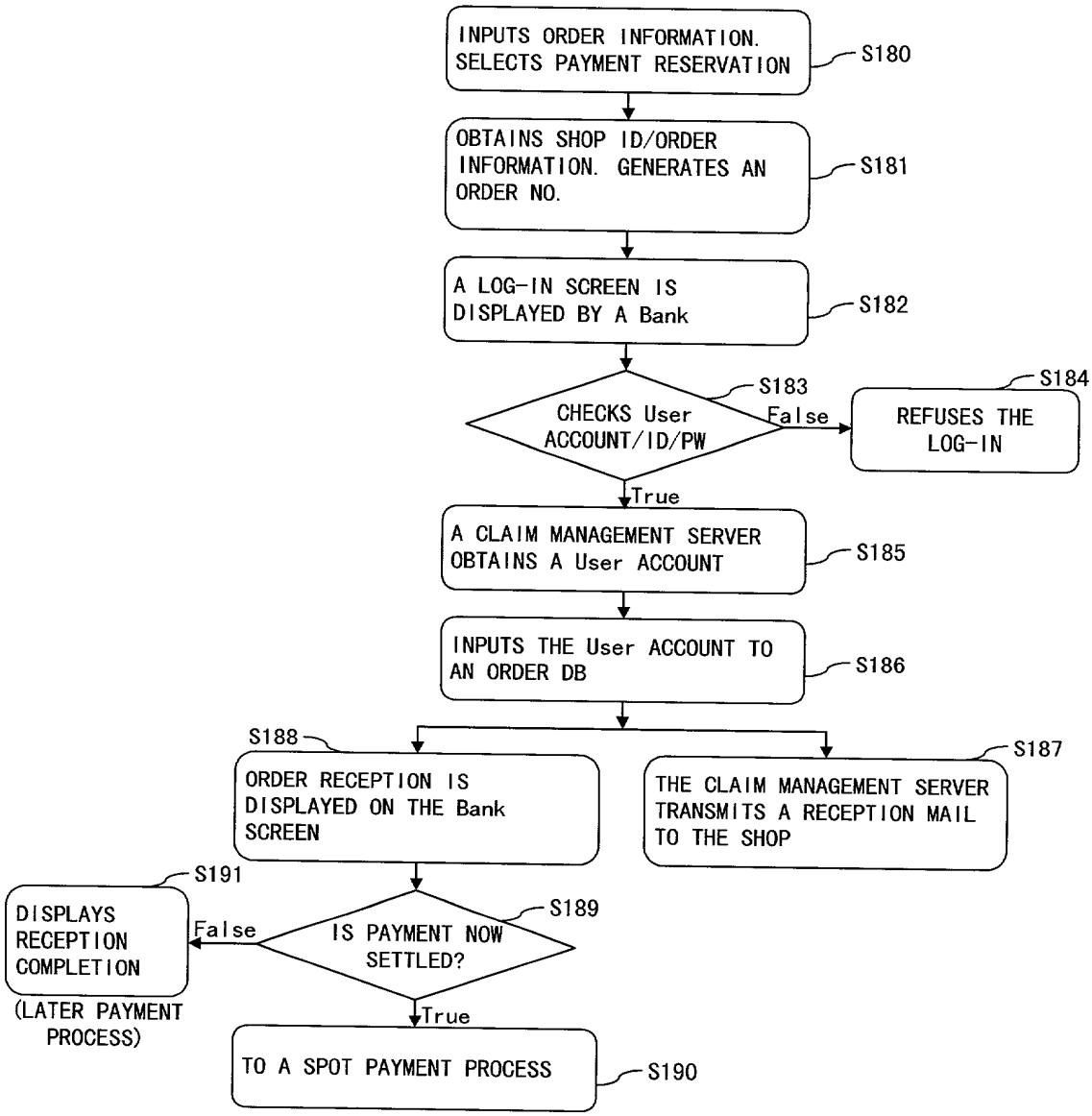
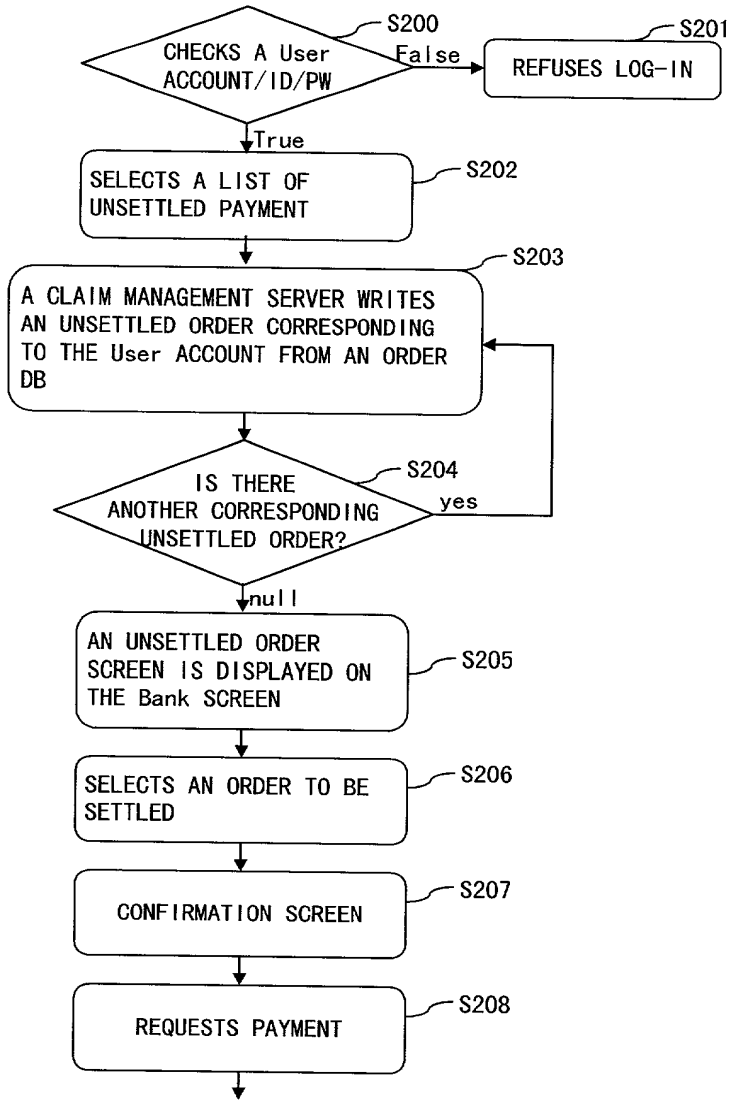

INPUTS ORDER INFORMATION. SELECTS PAYMENT RESERVATION
S180
OBTAINS SHOP ID/ORDER INFORMATION. GENERATES AN ORDER NO.
S181
A LOG-IN SCREEN IS DISPLAYED BY A Bank
S182
CHECKS User ACCOUNT/ID/PW
S183
False
REFUSES THE LOG-IN
S184
True
A CLAIM MANAGEMENT SERVER OBTAINS A User ACCOUNT
S185
INPUTS THE User ACCOUNT TO AN ORDER DB
S186
S188
ORDER RECEPTION IS DISPLAYED ON THE Bank SCREEN
THE CLAIM MANAGEMENT SERVER TRANSMITS A RECEPTION MAIL TO THE SHOP
S187
S191
DISPLAYS RECEPTION COMPLETION
(LATER PAYMENT PROCESS)
False
IS PAYMENT NOW SETTLED?
S189
True
TO A SPOT PAYMENT PROCESS
S190

FIG. 32



TO FIG. 34

FIG. 33

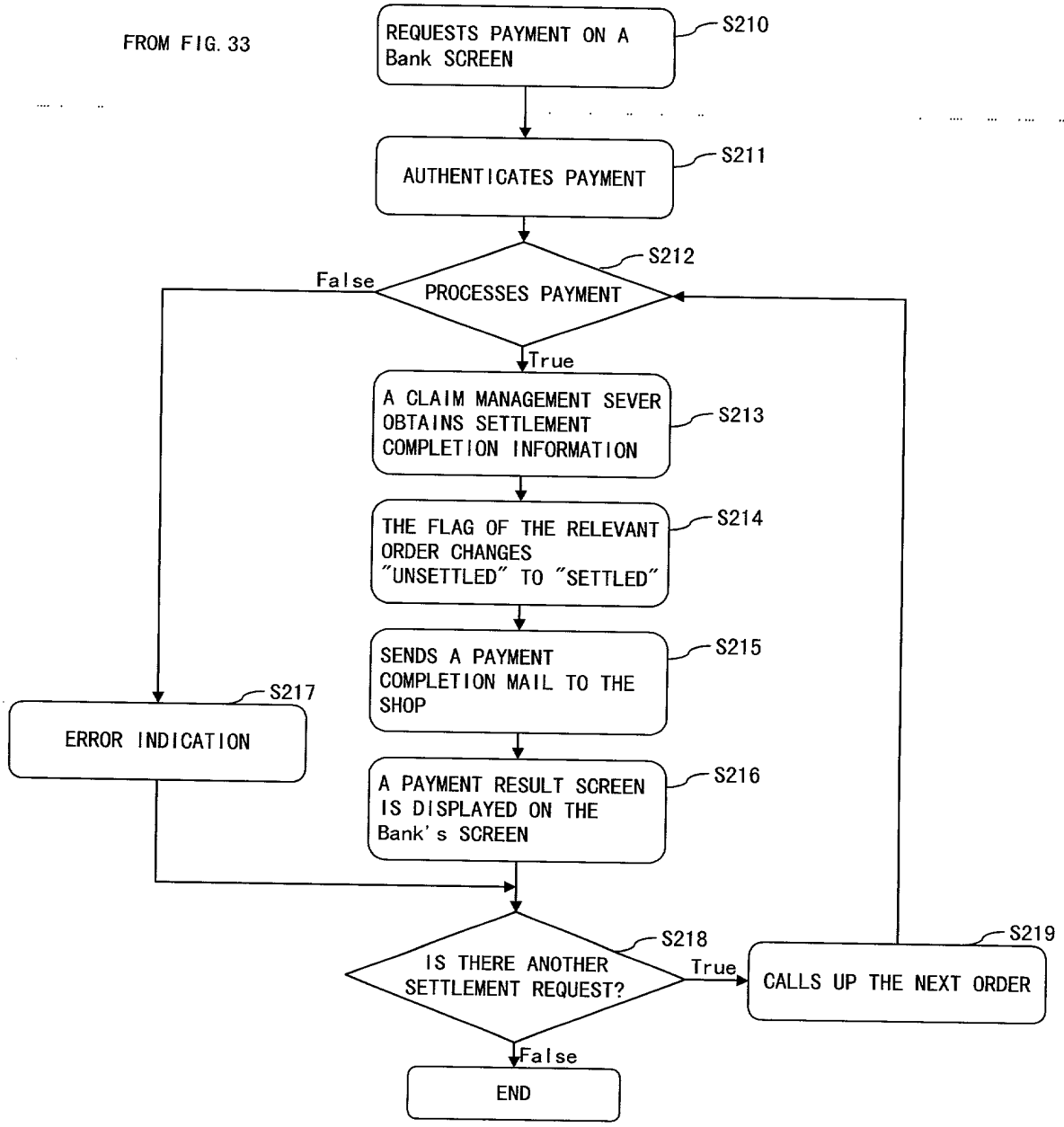

FROM FIG. 33
REQUESTS PAYMENT ON A Bank SCREEN
S210
AUTHENTICATES PAYMENT
S211
PROCESSES PAYMENT
S212
False
True
A CLAIM MANAGEMENT SEVER OBTAINS SETTLEMENT COMPLETION INFORMATION
S213
THE FLAG OF THE RELEVANT ORDER CHANGES "UNSETTLED" TO "SETTLED"
S214
SENDS A PAYMENT COMPLETION MAIL TO THE SHOP
S215
ERROR INDICATION
S217
A PAYMENT RESULT SCREEN IS DISPLAYED ON THE Bank's SCREEN
S216
IS THERE ANOTHER SETTLEMENT REQUEST?
S218
True
CALLS UP THE NEXT ORDER
S219
False
END

FIG. 34

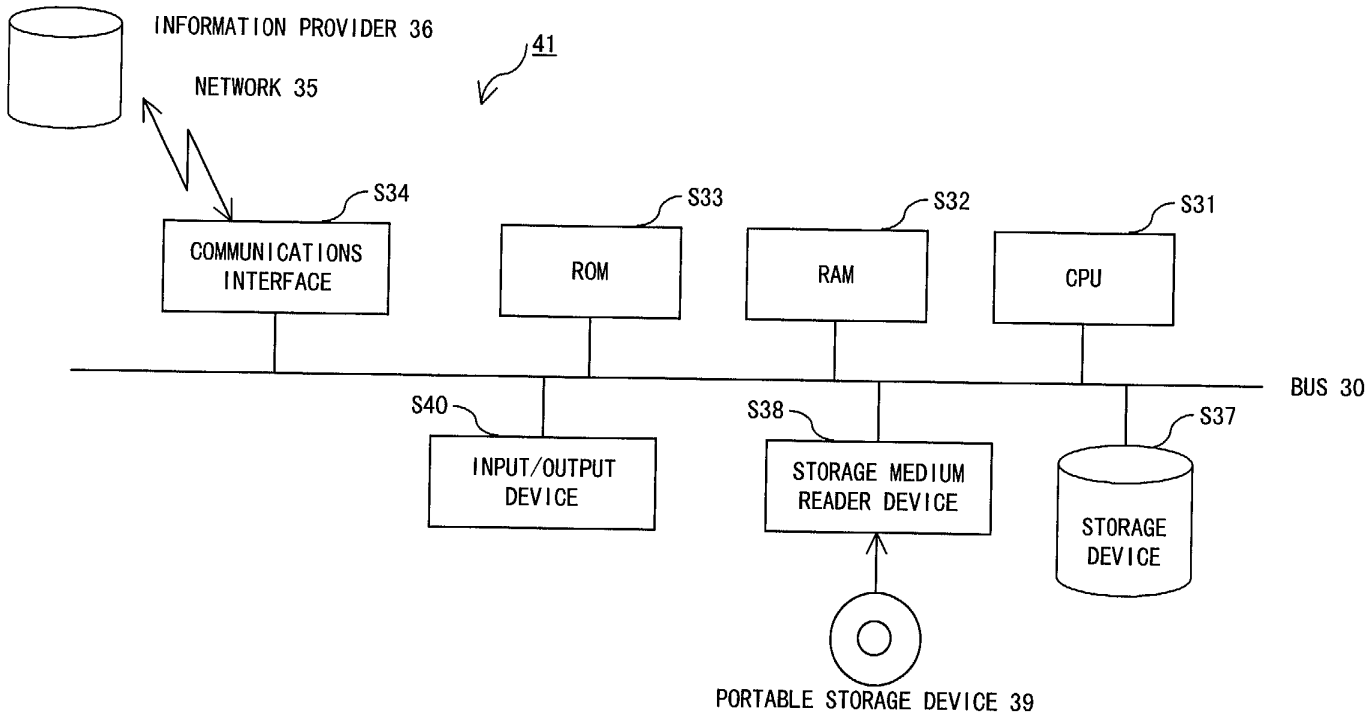

INFORMATION PROVIDER 36
NETWORK 35
41
S34
S33
S32
S31
COMMUNICATIONS INTERFACE
ROM
RAM
CPU
BUS 30
S40
S38
S37
INPUT/OUTPUT DEVICE
STORAGE MEDIUM READER DEVICE
STORAGE DEVICE
PORTABLE STORAGE DEVICE 39

FIG. 35